

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended)	WT Docket No. 99-87
)	
Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies)	RM-9332
)	
Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz)	RM-9405
)	
)	

NOTICE OF PROPOSED RULE MAKING

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By the Commission:

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I. INTRODUCTION AND EXECUTIVE SUMMARY

1. By this *Notice of Proposed Rule Making* ("*Notice*"), we commence a proceeding to implement Sections 309(j) and 337 of the Communications Act of 1934 ("Communications Act"), as amended by the Balanced Budget Act of 1997 ("Balanced Budget Act"),¹ which was signed into law on August 5, 1997. The Balanced Budget Act revised the Commission's auction authority for wireless telecommunications services. The purpose of this *Notice* is to seek comment on changes to the Commission's rules and policies to implement the revised auction authority.² In this *Notice*, we first review the Commission's auction authority as provided by the Omnibus Budget Reconciliation Act of 1993³ and how the Commission implemented that authority. We next discuss the statutory changes to the Commission's auction authority made by the Balanced Budget Act. We then seek comment on the scope of the Balanced Budget Act's exemption from competitive bidding for public safety radio services and the regulatory provisions that could be established to ensure that frequencies assigned without auctions meet the statutory requirements for exemption. We also seek comment on how the Balanced Budget Act's revision of our statutory auction authority affects our determinations of which wireless services are potentially auctionable and our determinations of the appropriate licensing scheme for new and existing services. Finally, we seek comment on how to implement competitive bidding for services that the Commission may determine are auctionable as a result of its revised authority.

¹ Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997).

² For the reasons discussed *infra* paragraph 65, this *Notice* does not address satellite services.

³ Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387 (1993) ("1993 Budget Act").

2. Among the matters this *Notice* seeks comment on are the following:
- ! The scope of the Balanced Budget Act's exemption from competitive bidding for licenses and permits issued for public safety radio services.
 - ! How the Balanced Budget Act's amendments to Section 309(j)(1) affect the categories of services that previously were determined to be nonauctionable by the Commission.
 - ! The extent to which Section 337(c) of the Communications Act, gives eligible providers of public safety services a means to obtain unassigned spectrum not otherwise allocated for public safety purposes.
 - ! A Petition for Rule Making filed by UTC, the Telecommunications Association and other parties, proposing that we establish a third radio service pool in the private land mobile bands below 800 MHz for use by electric, gas, and water utilities, petroleum and natural gas pipeline companies, and railroads, and whether we should adopt separate public safety radio services eligibility standards for (1) public safety and (2) public service entities.
 - ! Whether changes in the rules governing multiple-licensed systems would be appropriate to avoid artificial distinctions between such systems and commercial providers, which must obtain spectrum through competitive bidding.
 - ! Whether the Balanced Budget Act requires us to revise our licensing schemes and license assignment methods to provide for competitive bidding in services previously determined not to be auctionable, and how such schemes and methods for new services might be revised.
 - ! How we might implement competitive bidding to award licenses and permits for those services and frequency bands, if any, that will be auctionable for the first time, including what auction procedures would best promote the four public interest objectives listed in Section 309(j)(3)(A)-(D).

II. BACKGROUND

A. Commission Implementation of the 1993 Auction Standard

3. The Omnibus Budget Reconciliation Act of 1993 ("1993 Budget Act")⁴ added Section 309(j) to the Communications Act, authorizing the Commission to award licenses for use of the electromagnetic spectrum through competitive bidding where mutually exclusive applications are filed. The 1993 Budget Act expressly authorized, but did not require, the Commission to use competitive bidding to choose among mutually exclusive applications for initial licenses or construction permits.⁵ Following enactment of the

⁴ *Id.*

⁵ 47 U.S.C. § 309(j)(1) (1996). As added by the 1993 Budget Act, Section 309(j)(1) stated:

(1) General Authority. -- If mutually exclusive applications are accepted for filing for any initial license or construction permit which will involve a use of the electromagnetic spectrum described in paragraph (2), then the Commission shall have the authority, subject to paragraph (10), to grant such license or permit to a qualified applicant through the use of a system of competitive bidding that meets the requirements of this subsection.

1993 Budget Act, the Commission instituted a rule making proceeding to implement Section 309(j).⁶ Based on the record in that proceeding and the requirements of the statute, the *Competitive Bidding Second Report and Order* established rules governing the types of services and licenses that may be subject to auctions.⁷ The Commission also conducted several subsequent proceedings in which it established, for specific services, rules and procedures for the competitive bidding process that it believed would best achieve Congress's objectives.⁸

4. Pursuant to the 1993 Budget Act, Section 309(j)(1), "General Authority," only permitted the Commission to use competitive bidding if mutual exclusivity existed among applications that the Commission has accepted for filing. Indeed, Section 309(j)(6)(E) made clear that the Commission was not relieved of its obligation in the public interest to continue to use engineering solutions, negotiation,

Paragraph (10) provided a number of conditions precedent and conditions subsequent to the Commission's use of competitive bidding, which are moot. *See* 47 U.S.C. § 309(j)(10).

⁶ *See* Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Notice of Proposed Rule Making*, 8 FCC Rcd 7635 (1993) ("*Competitive Bidding Notice*").

⁷ *See* Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348 (1994) ("*Competitive Bidding Second Report and Order*"). *See also* Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Memorandum Opinion and Order*, 9 FCC Rcd 7245 (1994) ("*Competitive Bidding Second M O & O*").

⁸ *See, e.g.*, Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Third Report and Order*, 9 FCC Rcd 2941 (1994) ("*Competitive Bidding Third Report and Order*") (Narrowband Personal Communications Service); Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Fourth Report and Order*, 9 FCC Rcd 2330 (1994) ("*Competitive Bidding Fourth Report and Order*") (Interactive Video and Data Service); Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Fifth Report and Order*, 9 FCC Rcd 5532 (1994) ("*Competitive Bidding Fifth Report and Order*") (Broadband PCS); Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, Narrowband PCS, PP Docket No. 93-253, *Third Memorandum Opinion and Order and Further Notice of Proposed Rule Making* 10 FCC Rcd 175 (1994) (Narrowband PCS); Revision of Rules and Policies for the Direct Broadcast Satellite Service, IB Docket No. 95-168, *Report and Order*, 11 FCC Rcd 9712 (1995); Amendment of Parts 2 and 90 of the Commission's Rules to provide for the Use of 200 Channels Outside the Designated Filing Area in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, PR Docket No. 89-553, *Second Order on Reconsideration and Seventh Report and Order*, 11 FCC Rcd 2639 (1995) (900 MHz SMR); Rule Making To Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *Second Report and Order, Order on Reconsideration and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545 (1997); Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making*, 11 FCC Rcd 1463 (1995); Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Ninth Report and Order*, 11 FCC Rcd 14769 (1996) (Cellular Unserved Areas); Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, IB Docket No. 95-91, *Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rule Making*, 12 FCC Rcd 5754 (1997); Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785 (1997); Amendment of Part 90 of the Commission's Rules To Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Third Report and Order and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 10943 (1997).

threshold qualifications, service regulations and other means to avoid mutual exclusivity.⁹ The Commission has determined that applications are "mutually exclusive" if the grant of one application would effectively preclude the grant of one or more of the other applications.¹⁰ Where the Commission receives only one application that is acceptable for filing for a particular license that is otherwise auctionable, there is no mutual exclusivity, and thus no auction. Therefore, mutual exclusivity is established when competing applications for a license are filed.¹¹ For example, a request to provide service on the same frequency in the same or overlapping service area would trigger mutual exclusivity where both applicants could not offer service without causing electromagnetic interference to one another.¹²

5. Section 309(j)(1) also restricted the use of competitive bidding to applications for "initial" licenses or permits.¹³ Renewal licenses and permits were excluded from the auction process.¹⁴ As a result, the *Competitive Bidding Second Report and Order*, made clear that applications to modify existing licenses were generally not subject to competitive bidding.¹⁵ The Commission recognized, however, that if a modification is "major," *i.e.*, one that substantially alters a licensee's currently authorized facilities, and if the modification application is mutually exclusive with other applications, the Commission would consider treating the "major" modification as an initial application that would be subject to competitive bidding.¹⁶

6. In addition, Section 309(j)(2), "Uses to Which Bidding May Apply," set forth conditions beyond mutual exclusivity that had to be satisfied in order for spectrum to be auctionable. Specifically, it required the Commission to determine that:

⁹ 47 C.F.R. § 309(j)(6)(E). The legislative history of the 1993 Budget Act, which added Section 309(j)(6)(E), indicates that Congress intended the Commission to use tools that avoid mutual exclusivity "when feasible and appropriate." See H.R. Rep. No. 103-111, 103d Cong., 1st Sess., at 258-259 (1993) (citing licensing in the Big LEO satellite service as an example). See also H.R. Conf. Rep. No. 104-350, 104th Cong., 1st Sess., at 995 (1995) (Balanced Budget Act of 1995, subsequently vetoed, citing the 450-470 MHz band, shared by low-powered medical telemetry devices, as an example).

¹⁰ *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2350 n.5.

¹¹ Short-form applications to participate in competitive bidding are governed by Section 309(j), and not the procedural requirements of Sections 309(a), 309(b), or 309(e), or the *Ashbacker* doctrine, *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945) (comparative hearing required when competing applicants file conflicting license or construction permit applications for the same license). See *Elleron Oil Co. and WVI Partners, Inc. Petition for Reconsideration of Dismissal of Short-form Applications for Interactive Video and Data Service Auction*, *Order*, 13 FCC Rcd 17246, 17251-52 ¶ 9 (Wireless Bur. 1998). Section 309(j) does not require the Commission to use a notice and cut-off procedure or establish "cut-off dates" to invite mutually exclusive applications for a particular license. See *id.* at 17250 ¶ 8. See also *McElroy Electronics Corp. v. FCC*, 86 F.3d 248, 253 n.5 (D.C. Cir. 1996).

¹² *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2350 n.5.

¹³ See 47 U.S.C. § 309(j)(1). See also *Fresno Mobile Radio, Inc. v. FCC*, No. 97-1459 (D.C. Cir. Feb. 5, 1999) (upholding Commission's determination that geographic area licenses for an existing service are "initial licenses" within the meaning of § 309(j)(1) if the license is the first awarded for a particular frequency under a new licensing scheme).

¹⁴ See H.R. Rep. No. 103-111, at 253.

¹⁵ See *Competitive Bidding Second Report and Order* at 2355 ¶ 37.

¹⁶ See *id.* at 2355 ¶ 38.

- (A) the principal use of such spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers in return for which the licensee --
- (i) enables those subscribers to receive communications signals that are transmitted utilizing frequencies on which the licensee is licensed to operate; or
 - (ii) enables those subscribers to transmit directly communications signals utilizing frequencies on which the licensee is licensed to operate.¹⁷

In the *Competitive Bidding Second Report and Order*, the Commission explained that, in making this assessment, it would evaluate classes of licenses and permits, rather than make a principal use determination on a license-by-license basis.¹⁸ The Commission concluded that it would consider the principal use requirement to be met if, comparing the amount of non-subscription use made by the licensees with the amount of use rendered to subscribers for compensation, at least a majority of the use of a service or class of service was operated for the benefit of subscribers.¹⁹

7. Section 309(j)(2) further directed the Commission -- in evaluating the "uses to which bidding may apply" -- to determine whether "a system of competitive bidding will promote the [public interest] objectives described in [Section 309(j)(3)]."²⁰ Section 309(j)(3), entitled "Design of Systems of Competitive Bidding," directs that these factors be addressed in both identifying classes of licenses to be issued by competitive bidding, and designing particular methodologies of competitive bidding. The objectives are listed as follows:

- (A) the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas, without administrative or judicial delays;
- (B) promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women;
- (C) recovery for the public of a portion of the value of the public spectrum resource made available for commercial use and avoidance of unjust enrichment through the methods employed to award uses of that resource; and
- (D) efficient and intensive use of the electromagnetic spectrum.²¹

1. Services Determined to Be Auctionable

8.

Employing the criteria outlined above, the Commission identified a number of services and classes of services that were auctionable under the 1993 Budget Act if mutually exclusive applications are

¹⁷ 47 U.S.C. § 309(j)(2)(A) (1996).

¹⁸ See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2354 ¶¶ 32-33.

¹⁹ See *id.* at 2354 ¶ 32.

²⁰ 47 U.S.C. § 309(j)(2)(B) (1996).

²¹ 47 U.S.C. § 309(j)(3)(A)-(D).

accepted for filing.²² Among the services the Commission found auctionable under the 1993 Budget Act (all of which involve commercial use of the spectrum) were narrowband and broadband Personal Communications Services (PCS),²³ Public Mobile Services,²⁴ 218-219 MHz Service,²⁵ Specialized Mobile Radio Services (SMR),²⁶ Private Carrier Paging (PCP) Services,²⁷ Multipoint Distribution Service (MDS),²⁸ Multichannel Multipoint Distribution Service (MMDS),²⁹ General Wireless Communications Service (GWCS),³⁰ Local Multipoint Distribution Service (LMDS),³¹ Wireless Communications Service

²² The Commission also adopted competitive bidding for assignment of licenses in the 39 GHz band after enactment of the Balanced Budget Act. *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order and Second Notice of Further Rule Making*, 12 FCC Rcd 18600, 18645-46 ¶¶ 98-99 (1997) ("*39 GHz Report and Order*").

²³ *See Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2358 ¶ 58 (1994).

²⁴ *See id.* at 2359 ¶ 61.

²⁵ *See id.* at 2357 ¶ 53. This service was formerly designated the Interactive Video and Data Service (IVDS). *See* Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Order, Memorandum Opinion and Order, and Notice of Proposed Rulemaking*, FCC 98-228 at ¶ 16 (rel. September 17, 1998).

²⁶ *See* Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, GN Docket No. 93-252, *Third Report and Order*, 9 FCC Rcd 7988, 8138 ¶ 337, 8140 ¶ 341 (1994) ("*CMRS Third Report and Order*").

²⁷ *See Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2359 ¶ 63.

²⁸ *See id.* at 2359 ¶ 62.

²⁹ *See id.*

³⁰ *See* Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, ET Docket No. 94-32, *Second Report and Order*, 11 FCC Rcd 624, 642, ¶ 42 (1995).

³¹ *See* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *Third Notice of Proposed Rulemaking and Supplemental Tentative Decision*, 11 FCC Rcd 53, 102 ¶ 134 (1995) ("*LMDS Third Notice*").

(WCS),³² Digital Audio Radio Service (DARS),³³ Direct Broadcast Satellite (DBS) Service,³⁴ 220-222 MHz radio service,³⁵ Location and Monitoring Service (LMS),³⁶ and VHF Public Coast Stations.³⁷

2. Services Determined to Be Nonauctionable

9. Based on the statutory criteria contained in the 1993 Budget Act, the Commission also determined that a number of services were not auctionable, including "private services" that were for "internal use," and thus not subscriber-based.³⁸ Generally, private radio services are used by government or business entities to meet internal communications needs, or by individuals for personal communications.³⁹ Private radio services that the Commission decided were not auctionable under the

³² See Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS"), GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785, 10817, ¶ 63 (1997)

³³ See In the Matter of Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, IB Docket No. 95-91, *Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754, 5814-15, ¶¶ 149-150 (1997).

³⁴ See In the Matter of Revision of Rules and Policies for the Direct Broadcast Satellite Service, IB Docket No. 95-168, *Report and Order*, 11 FCC Rcd 9712, 9779 ¶ 165 (1995).

³⁵ See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Second Memorandum Opinion and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd 188, 243, ¶ 111 (1997).

³⁶ See Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Report and Order*, 10 FCC Rcd 4695, 4725-26, ¶¶ 54-57 (1995).

³⁷ See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853, 19882-83 ¶ 61 (1998) ("*Maritime Third Report and Order*").

³⁸ *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 ¶ 25. The legislative history of the 1993 Budget Act refers to "private services" as services that do not involve the receipt of compensation from subscribers, "i.e., that were for internal use." See *id.* at 2352 ¶¶ 23-25; H.R. Rep No. 103-111 at 253. In excluding private services from competitive bidding, the Commission found that Congress did not intend the words "private services" to have the same meaning the Commission gave such services in other contexts. For example, the Commission determined that some private land mobile services ("PLMRS"), such as the 220 MHz nationwide commercial channels that traditionally involved the receipt of compensation from subscribers, were auctionable. See *Competitive Bidding Second Report and Order* at 2353 ¶ 29. The Commission also distinguished the term "private services" from "private mobile service" ("PMRS") because PMRS is defined on the basis of several criteria that are not relevant to Section 309(j), such as whether interconnected mobile service is provided for a profit to the public or a substantial portion of the public. See *Competitive Bidding Second Report and Order* at 2352 n.12.

³⁹ Wireless Telecommunications Bureau, *Private Land Mobile Radio Services: Background 2 & n.1* (Dec. 18, 1996) (*PLMR White Paper*). This report was prepared to provide a background for future policy decisions regarding the private land mobile services. *Id.* at 2. The private radio services include the Private Land Mobile Radio Services (PLMRS); parts of the Maritime and Aviation Services, such as private coast station spectrum, see 47 C.F.R. § 80.501(a); and the Personal Radio Services, see 47 C.F.R. Part 95.

1993 Budget Act include the Public Safety Radio Services,⁴⁰ 220 MHz channels reserved for private service, the Instructional Television Fixed Service (ITFS), the Citizens Band Service, the Radio Control Service, the General Mobile Radio Service, the Amateur Radio Service, Non-SMR licensees above 800 MHz, Multiple Licensed Systems below 800 MHz, and the Private Land Mobile Radio Service (PLMRS) below 470 MHz.⁴¹

10. *Licensing in the Private Radio Services.* The services deemed nonauctionable under the 1993 statute were largely private and noncommercial offerings operating on a variety of frequency bands. Generally, the private radio services are those that are used by government or business entities to meet their own internal communications needs or by individuals for personal communications, rather than to provide communications services to others.⁴² The private radio services include the PLMRS; parts of the Maritime and Aviation Services, such as private coast station spectrum;⁴³ and the Personal Radio Services,⁴⁴ such as the Citizens Band (CB) Radio Service.⁴⁵ In contrast to its extensive use of geographic area licensing for services determined to be auctionable under the 1993 Budget Act, to date, the Commission has employed a variety of alternative licensing approaches for these private radio services.⁴⁶

11. PLMRS frequencies below 470 MHz represent the majority of the frequencies allocated to the private radio services.⁴⁷ The principal bands are the 25-50 MHz band (commonly referred to as the "low band"), the 72-76 MHz band, the 150-174 MHz band (often called the "high band"), and the 450-470 MHz band (sometimes known as the "UHF band").⁴⁸ Formerly, these frequencies were divided into twenty

⁴⁰ The Public Safety Radio Services were subsequently combined with the Special Emergency Radio Services to form the Public Safety Radio Pool. See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Second Report and Order*, 12 FCC Rcd 14307, 14317-18 ¶ 20 (1997), *recon. pending* ("Reforming *Second Report and Order*").

⁴¹ See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352-53 ¶ 26; *Competitive Bidding Notice*, 8 FCC Rcd at 7639 ¶ 27, 7660 ¶ 146 (1993). The plain language of the 1993 Budget Act also excluded traditional broadcast services from competitive bidding, because broadcast licensees do not receive compensation from subscribers. See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 ¶ 22. Consistent with the clear legislative intent, we excluded from the competitive bidding process broadcast television (VHF, UHF, and LPTV), broadcast radio (AM and FM), and the Instructional Television Fixed Service (ITFS). *Id.*

⁴² Wireless Telecommunications Bureau, *Private Land Mobile Radio Services: Background 2 & n.1* (Dec. 18, 1996) ("*PLMR White Paper*"). This report was prepared to provide a background for future policy decisions regarding the private land mobile services. *Id.* at 2.

⁴³ See 47 C.F.R. § 80.501(a).

⁴⁴ See 47 C.F.R. Part 95.

⁴⁵ See 47 C.F.R. § 95.412(a).

⁴⁶ See *infra* paragraphs 11-17.

⁴⁷ *PLMR White Paper* at E-9.

⁴⁸ In addition, frequencies in the 421-430 MHz band are available in three cities (Buffalo, Cleveland, and Detroit), 47 C.F.R. § 90.273, and some frequencies in the 220-222 MHz band formerly were allocated for site-based PLMRS use, but are now licensed geographically, see Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Third Report and Order*;

separate and diverse radio services, such as the Local Government, Telephone Maintenance, and Motor Carrier Radio Services.⁴⁹ In 1997, however, the Commission consolidated these twenty services into two pools -- the Public Safety Radio Pool and the Industrial/Business Radio Pool -- in order to increase licensee flexibility to manage spectrum more efficiently by giving users access to a larger set of frequencies, and to reduce administrative burdens on users and the Commission by eliminating the need to go through inter-category sharing procedures in order to obtain unassigned spectrum.⁵⁰ Because, as discussed in greater detail *infra*, the Public Safety Radio Pool is comprised of services that we tentatively conclude are within the statutory exemption from competitive bidding,⁵¹ this discussion will focus on licensing in the Industrial/Business pool. Eligibility in the Industrial/Business pool is open to persons primarily engaged in the operation of a commercial activity; the operation of educational, philanthropic, or ecclesiastical institutions; clergy activities; or the operation of hospitals, clinics, or medical associations.⁵² The majority of communications systems utilizing these frequencies are used to support day-to-day business operations (such as dispatching and diverting personnel or work vehicles, coordinating the activities of workers and machines on location, or remotely monitoring and controlling equipment), but many also are used for responding to emergencies.⁵³

12. The private radio services also include PLMRS frequencies above 470 MHz, specifically, in the 806-821/851-866 MHz band (the 800 MHz band) and the 896-901/935-940 MHz band (the 900 MHz band).⁵⁴ The Commission divided PLMRS frequencies above 800 MHz into three categories -- Public Safety, Business, and Industrial/Land Transportation, each consisting of one or more of the radio services consolidated into the two pools below 470 MHz, and a General category open to entities eligible in the other three categories and the Specialized Mobile Radio category.⁵⁵ The Commission designated private radio spectrum in the 800 and 900 MHz bands as shared,⁵⁶ but concluded that a licensee may obtain exclusive use of a frequency by showing that it will meet certain loading requirements, *i.e.*, that it will have a minimum number of mobile units operating on the frequency.⁵⁷ Coordination is required for

Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943 (1997).

⁴⁹ See *Refarming Second Report and Order*, 12 FCC Rcd at 14309 ¶ 6.

⁵⁰ *Id.* at 14315-17 ¶¶ 15-19.

⁵¹ See *infra* paragraph 27.

⁵² 47 C.F.R. § 90.35(a).

⁵³ *Refarming Second Report and Order*, 12 FCC Rcd at 14328-30 ¶¶ 40-41.

⁵⁴ See 47 C.F.R. Part 90 Subpart S. In addition, frequencies in the 471-512 MHz band have been allocated for PLMRS use in thirteen metropolitan areas, see 47 C.F.R. § 90.303, but as a practical matter the frequencies are not available in Cleveland and Detroit, due to concerns raised by Canada. See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076, 10110 n.124 (1995) ("*Refarming Report and Order*").

⁵⁵ 47 C.F.R. §§ 90.615, 90.617.

⁵⁶ 47 C.F.R. § 90.173(a).

⁵⁷ See 47 C.F.R. §§ 90.625(a), 90.631, 90.633.

assignment of these frequencies,⁵⁸ but, unlike the PLMRS frequencies below 470 MHz, the rules for the 800 MHz and 900 MHz bands set forth a minimum distance separation between co-channel stations.⁵⁹ However, "short-spacing" is permitted if certain criteria are met.⁶⁰

13. The traditional approach to the licensing of users of private spectrum generally does not result in the filing of mutually exclusive applications because the frequencies are intensively shared, assigned on a first-come, first-served basis, and/or subject to frequency coordination.⁶¹ For example, PLMRS spectrum is licensed on a site-by-site basis. Thus, a prospective licensee applies for authority to construct and operate transmission facilities at a specifically designated location or locations using a particular antenna height and signal strength.⁶² Historically, site-based licensing has met the needs of PLMRS users like railroads or petroleum pipelines, which need to cover long but narrow areas rather than the wider areas that ordinarily constitute geographic licensing regions.⁶³ Many other PLMRS users, such as manufacturers seeking to link their raw material, processing, and finishing operations, also have unique configuration requirements.⁶⁴

14. Within the PLMRS services, Industrial/Business frequencies are licensed on a shared, non-exclusive basis,⁶⁵ which allows multiple users with different coverage and capacity requirements to use the same frequencies effectively. Shared use increases the amount of frequency reuse that is possible compared to exclusive use with set distance separations, but requires that private system users must be able to tolerate interference and manage potential blocked access to channels.⁶⁶ Such problems are minimized, however, by the frequency coordination process, which involves the use of certified coordinators who analyze applications before they are submitted to the Commission to select a frequency

⁵⁸ See 47 C.F.R. § 90.175(e).

⁵⁹ See 47 C.F.R. § 90.621.

⁶⁰ *Id.*

⁶¹ In the *Competitive Bidding Second Report and Order*, we excluded from competitive bidding those services in which mutual exclusivity between applications cannot exist because channels are shared by multiple licensees. See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2351 ¶¶ 13-14. See also Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, WT Docket No. 97-82, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd. 374, 385 ¶ 11 (1997) ("*Part 1 Third Report and Order*"). See also 9 FCC Rcd. at 2351 ¶¶ 15-18. In the *Competitive Bidding Second Report and Order*, the Commission found that for services in which licenses are assigned on a "first-come, first-served" basis, mutual exclusivity among applications will not exist. Specifically, the Commission concluded that use of "first-come-first-served" procedures generally avoids mutual exclusivity because the Commission does not consider competing applications. Rather, the applications are processed in sequence based on filing date and the first acceptable application is granted. *Id.*

⁶² *PLMR White Paper* at E-14 to E-15; see 47 C.F.R. §§ 90.173(b), 90.176(e)(3).

⁶³ *PLMR White Paper* at 28-29; see also UTC, The Telecommunications Association, American Petroleum Institute, and Association of American Railroads Petition for Rulemaking at 12 (filed Aug. 14, 1998).

⁶⁴ See *PLMR White Paper* at 8, 25.

⁶⁵ 47 C.F.R. § 90.173(a).

⁶⁶ *PLMR White Paper* at E-10.

that will meet the applicant's needs while minimizing interference to licensees already using the frequency band.⁶⁷

15. The Commission had certified one coordinator for each radio service in the bands below 800 MHz,⁶⁸ but now that those frequencies have been consolidated, applicants for those PLMR frequencies generally may use the services of any frequency coordinator certified in the pool.⁶⁹ This introduction of competition among coordinators was intended to foster lower coordination costs and better service to the public.⁷⁰ We have not introduced competition into the frequency coordination process in the 800 MHz and 900 MHz bands, so the potential for improvement in those areas still exists.⁷¹ Moreover, even below 800 MHz, applicants still sometimes contend that receiving a coordinator's recommendation takes too long and costs too much. Indeed, the Commission acknowledged that the changes made to date may not be sufficient to maximize the efficiency of our PLMR licensing procedures.⁷²

16. Some private radio frequencies are available for shared use without any frequency coordination. One example is private coast station spectrum.⁷³ Private coast stations serve the business and operational needs of vessels and may not charge fees for the provision of communications services.⁷⁴ For example, a private coast station may be used by a vessel towing company to communicate with

⁶⁷ *Id.* at E-11; *see* 47 C.F.R. §§ 90.173, 90.175, 90.176. Specifically, the frequency coordinator makes a recommendation to the Commission regarding the best available frequency for the applicant's proposed operations in the relevant area, based on the nature, size, and purpose of the radio systems already authorized on that frequency. *PLMR White Paper* at E-11 to E-13. For example, some users, such as airlines and taxi companies, have predictable peak operating periods every day, so it is important that incompatible users not be licensed on the same frequency too close to each other. *See id.* at 26-27. The coordinators maintain extensive frequency databases, and notify each other when a frequency is coordinated in order to avoid conflicting coordinations. *See* 47 C.F.R. § 90.176(a).

⁶⁸ *Refarming Second Report and Order*, 12 FCC Rcd at 14324-25 ¶ 32.

⁶⁹ 47 C.F.R. § 90.35(b)(2)(ii). Applicants for frequencies that were allocated solely to the Power, Petroleum, or Railroad Radio Services must use the certified coordinator for that service. 47 C.F.R. § 90.35(b)(2)(i). This requirement was retained in order to ensure the integrity of the frequencies, because licensees in those services sometimes use radio as a critical tool for responding to emergencies that could be extremely dangerous to the general public. *Refarming Second Report and Order*, 12 FCC Rcd at 14330-31 ¶¶ 41-42.

⁷⁰ *Refarming Second Report and Order*, 12 FCC Rcd at 14328 ¶ 40.

⁷¹ *See* Frequency Coordination in the Private Land Mobile Services, PR Docket No. 83-737, *Report and Order*, 103 FCC 2d 1093, 1142-47 ¶¶ 100-08 (1986).

⁷² *Refarming Second Report and Order*, 12 FCC Rcd at 14324 ¶ 31. For example, it remains to be seen whether the use of multiple coordinators for the same spectrum will affect coordinators' efforts to balance the applicant's interest in obtaining the best possible assignment with the broader user community's interest in retaining as large a spectrum reserve as possible. *See* Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Notice of Proposed Rule Making*, 7 FCC Rcd 8105, 8112 ¶ 19 (1992).

⁷³ *See* 47 C.F.R. § 80.373.

⁷⁴ *See* 47 C.F.R. §§ 80.501(a), 80.515.

potential customers, or by a fishing company to maintain radio contact with its fleet.⁷⁵ Frequencies are available in the 2-27.5 MHz band for communicating with vessels hundreds or thousands of miles away, and in the 156-162 MHz band for communications in a port area.⁷⁶ Users are required to limit their communications to the minimum practicable transmission time.⁷⁷ General use of tools to maximize spectrum efficiency, other than sharing of spectrum, have not been deemed necessary for private coast spectrum because, except in certain areas, the available spectrum, which is internationally allocated to promote interoperability among vessels and stations of different nations,⁷⁸ generally has been sufficient to meet demand. Frequency coordination is required for the assignment of VHF frequencies in Southern California and Washington State.⁷⁹ In addition, some high seas frequencies are congested in some areas, but no entity has expressed interest in coordinating them.⁸⁰

17. Another example of private radio frequencies available for shared use without any frequency coordination are those services that are "licensed by rule," meaning that no licenses are issued, such as the CB Radio Service.⁸¹ The CB Radio Service is a private, two-way, short-distance voice communications service for personal or business activities of the general public.⁸² Users may transmit communications about their personal or business activities, emergencies, and traveler assistance,⁸³ but users must limit their communications to the minimum practicable time.⁸⁴ Licensing by rule must be authorized by Congress,⁸⁵ and is appropriate only for low-power,⁸⁶ short-distance services with multiple, shared channels,⁸⁷ where users can avoid congestion fairly easily. Because these service utilize very user-friendly equipment, no

⁷⁵ Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 12 FCC Rcd 16949, 16954 ¶ 5 (1997) (*Maritime Second Report and Order*).

⁷⁶ See 47 C.F.R. § 80.371(c), (f).

⁷⁷ 47 C.F.R. § 80.517.

⁷⁸ See *Maritime Second Report and Order*, 12 FCC Rcd at 16951 ¶ 1.

⁷⁹ 47 C.F.R. §§ 80.513, 80.514.

⁸⁰ See *Maritime Second Report and Order*, 12 FCC Rcd at 17013-14 ¶ 130 (proposing to allow private coast stations to use public coast spectrum in the 2-4 MHz band in order to relieve congestion).

⁸¹ 47 C.F.R. § 95.404.

⁸² 47 C.F.R. § 95.401(a).

⁸³ 47 C.F.R. § 95.412(a).

⁸⁴ 47 C.F.R. § 95.416.

⁸⁵ See 47 U.S.C. § 307(e)(1).

⁸⁶ See 47 C.F.R. §§ 95.410, 95.411.

⁸⁷ See 47 C.F.R. § 95.407(a), (e)-(g).

purpose would be served by requiring users to demonstrate their qualifications, and effective enforcement of a licensing requirement would be extremely difficult.⁸⁸

B. The Balanced Budget Act of 1997

18. In the summer of 1997, Congress revised the Commission's auction authority. Specifically, the Balanced Budget Act of 1997 amended Section 309(j)(1) to require the Commission to award mutually exclusive applications for initial licenses or permits using competitive bidding procedures, except as provided in Section 309(j)(2). Sections 309(j)(1) and 309(j)(2) now state:

(1) General Authority.--If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.

(2) Exemptions.--The competitive bidding authority granted by this subsection shall not apply to licenses or construction permits issued by the Commission--

(A) for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that--

(i) are used to protect the safety of life, health, or property; and

(ii) are not made commercially available to the public;

(B) for initial licenses or construction permits for digital television service given to existing terrestrial broadcast licensees to replace their analog television service licenses; or

(C) for stations described in section 397(6)⁸⁹ of this title.⁹⁰

Prior to the Balanced Budget Act of 1997, Sections 309(j)(1) and 309(j)(2) granted the Commission the authority to use competitive bidding to resolve mutually exclusive applications for initial licenses or permits if the principal use of the spectrum was for subscription-based services and competitive bidding would promote the objectives described in Section 309(j)(3). As amended by the Balanced Budget Act of 1997, Section 309(j)(1) states that the Commission *shall* use competitive bidding to resolve mutually exclusive initial license or permit applications, unless one of the three exemptions provided in the statute applies.⁹¹

19. As noted above, the Balanced Budget Act of 1997 left unchanged the restriction that competitive bidding may only be used to resolve mutually exclusive applications. Moreover, the general auction authority provision of Section 309(j)(1) now references the obligation under Section 309(j)(6)(E) to use engineering solutions, negotiation, threshold qualifications, service regulations, or other means to avoid mutual exclusivity where to do so is in the public interest. In addition, the portion of the Conference Report that accompanies this section of the legislation emphasizes that notwithstanding the Commission's

⁸⁸ See, e.g., Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Voice Radio Service, WT Docket No. 95-102, *Report and Order*, 11 FCC Rcd 12977, 12983-84 ¶ 17 (1996).

⁸⁹ 47 U.S.C. § 397(6). Section 397(6) defines the terms "noncommercial educational broadcast station" and "public broadcast station."

⁹⁰ 47 U.S.C. § 309(j)(1), (2) (as amended by Balanced Budget Act, § 3002) (footnote added).

⁹¹ See 47 U.S.C. § 309(j)(2) (emphasis added).

expanded auction authority, its determinations regarding mutual exclusivity must still be consistent with and not minimize its obligations under Section 309(j)(6)(E). The conferees expressed concern that the Commission not interpret its expanded auction authority in a manner that overlooks engineering solutions or other tools that avoid mutual exclusivity.⁹²

20. Section 309(j)(2), as amended by the Balanced Budget Act of 1997, exempts from auctions licenses and construction permits for public safety radio services, digital television service licenses and permits given to existing terrestrial broadcast licensees to replace their analog television service licenses, and licenses and construction permits for noncommercial educational broadcast stations and public broadcast stations. Recently, the Commission has observed that the list of exemptions from our general auction authority set forth in Section 309(j)(2) is exhaustive, rather than merely illustrative, of the types of licenses or permits that may not be awarded through a system of competitive bidding.⁹³ Although the reference to Section 309(j)(3) is now deleted from Section 309(j)(2), it is worth noting that Section 309(j)(3), "Design of Systems of Competitive Bidding," was not amended by the Balanced Budget Act of 1997 and still directs the Commission to consider the public interest objectives in identifying classes of licenses and permits to be issued by competitive bidding.

21. The Conference Report for Section 3002(a) of the Balanced Budget Act of 1997 states that the exemption for public safety radio services includes "private internal radio services" used by utilities, railroads, metropolitan transit systems, pipelines, private ambulances, volunteer fire departments, and not-for-profit organizations that offer emergency road services, such as the American Automobile Association (AAA).⁹⁴ The Conference Report also notes that the exemption is "much broader than the explicit definition for 'public safety services'" included in Section 337(f)(1) of the Communications Act,⁹⁵ for the purpose of determining eligibility for licensing in the 24 MHz of spectrum reallocated for public safety services.⁹⁶

⁹² See H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572 (1997) ("Conference Report") ("[T]he conferees emphasize that, notwithstanding its expanded auction authority, the Commission must still ensure that its determinations regarding mutual exclusivity are consistent with the Commission's obligations under section 309(j)(6)(E). The conferees are particularly concerned that the Commission might interpret its expanded competitive bidding authority in a manner that minimizes its obligations under section 309(j)(6)(E), thus overlooking engineering solutions, negotiations, or other tools that avoid mutual exclusivity.").

⁹³ Implementation of Section 309(j) of the Communications Act -- Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, MM Docket No. 97-234, *First Report and Order*, 13 FCC Rcd 15920, 16000 ¶ 199 (1998) ("*Commercial Broadcast Competitive Bidding First Report & Order*").

⁹⁴ See Conference Report at 572.

⁹⁵ 47 U.S.C. § 337(f)(1), *added by* Balanced Budget Act § 3004. See Conference Report at 572.

⁹⁶ Conference Report at 572. For purposes of comparison, the definition of "public safety services" included in Section 337(f)(1) provides:

The term "public safety services" means services--

(A) the sole or principal purpose of which is to protect the safety of life, health, or property;

(B) that are provided--

(i) by State or local government entities; or

(ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and

(C) that are not made commercially available to the public by the provider.

22. The 1997 amendments also eliminate the Commission's authority to issue licenses or permits by random selection after July 1, 1997, with the exception of licenses or permits for noncommercial educational radio and television stations.⁹⁷

III. DISCUSSION

A. General Approach to Implementing Legislation

23. In this *Notice*, we seek comment on which radio services or classes of services Congress intended to exempt from competitive bidding. We also seek comment on how the Balanced Budget Act's modification of our statutory auction authority affects our analysis of whether spectrum licenses for non-exempt wireless services are auctionable. Specifically, we inquire about the scope and content of our obligation to continue to avoid mutual exclusivity under Sections 309(j)(1) and 309(j)(6)(E). We also inquire whether alternative licensing schemes and techniques would more readily give effect to the goals expressed in the relevant Balanced Budget Act changes. In addition, in view of the above-mentioned statutory changes, we explore the criteria to be used in establishing licensing schemes both for existing wireless services and for wireless services as to which no licensing rules have yet been adopted.

24. We note that we have concluded in other proceedings that the revised statute does not require us to re-examine our determinations that specific services or frequency bands were auctionable under the 1993 Budget Act's more restrictive definition of our auction authority.⁹⁸ Consistent with our conclusions in those previous proceedings, this proceeding will not re-examine the Commission's previous determinations that specific services or frequency bands were auctionable under the 1993 Budget Act.

B. Principles for Determining Whether a License Is Subject to Auction

25. By requiring the Commission to use auctions to resolve mutually exclusive applications for all categories of spectrum licenses except those that are expressly exempt, Congress established a new approach to determining the auctionability of spectrum. Under the revised Section 309(j)(1), whether a particular service or class of frequencies is used principally for subscriber-based services is no longer dispositive. With the elimination of this criterion for determining auctionability of mutually exclusive applications, unless a service is expressly exempt from competitive bidding, the only remaining requirement for auctionability is that, subject to our "obligation in the public interest . . . to avoid mutual exclusivity in application and licensing proceedings,"⁹⁹ there be mutually exclusive applications accepted

47 U.S.C. § 337(f)(1).

⁹⁷ Balanced Budget Act at § 3002(a)(2)(B)(5). In the Conference Report that accompanied the legislation, these changes are characterized as providing for "expanded" auction authority. Conference Report at 572.

⁹⁸ See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853, 19882-83 at ¶¶ 60-61 (1998) (earlier finding that public coast service is subject to competitive bidding is unchanged by Balanced Budget Act); Amendment of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Second Report and Order*, 13 FCC Rcd 15182, 15187-88 ¶ 9 (1998). See also Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Order on Reconsideration of the Second Report and Order*, FCC 99-3, at ¶¶ 3-4 (rel. Jan. 21, 1999).

⁹⁹ 47 U.S.C. § 309(j)(6)(E).

for licenses in that service.¹⁰⁰ Thus, in enacting the Balanced Budget Act, Congress simplified the statute, apparently expanding its potential scope, by requiring spectrum auctions with certain limited exceptions.¹⁰¹ Accordingly, we seek comment on how the Balanced Budget Act's amendments to Section 309(j)(1) affect our determinations of which services are potentially auctionable and which are not.

C. Public Safety Radio Services Exemption

26. Of particular importance to determining the auctionability of wireless services is the express exemption from the Commission's auction authority for "public safety radio services," added by the Balanced Budget Act's amendment to Section 309(j)(2). The exemption is provided for certain *public safety radio services* meeting the conditions contained in the statutory language,¹⁰² rather than for a certain class of public safety licensees (*i.e.*, police, fire, etc.).¹⁰³ Thus we seek comment on how to apply this exemption. This *Notice*, however, does not seek comment on the exemptions from competitive bidding for digital television or noncommercial educational broadcast stations and public broadcast stations.¹⁰⁴

27. The Balanced Budget Act defines "public safety radio services" to include private internal radio services used by State and local governments and non-government entities, and including emergency road services provided by not-for-profit organizations, that (i) are used to protect the safety of life, health, or property, and (ii) are not made commercially available to the public. The relevant legislative history states that "public safety radio services" is much broader than the explicit definition of "public safety services" contained in Section 337 of the Communications Act, which determines eligibility for licensing in the 24 MHz of spectrum reallocated for public safety services.¹⁰⁵ In view of the express statutory

¹⁰⁰ See 47 U.S.C. § 309(j)(1) (as amended by Balanced Budget Act, § 3002).

¹⁰¹ We note that the Balanced Budget Act, in addition to modifying our auction authority, also eliminated Commission's lottery authority for all applications other than those for noncommercial educational broadcast station licenses. See 47 U.S.C. § 309(i)(5)(A) (as added by Balanced Budget Act § 3002(a)(2)).

¹⁰² See *supra* paragraph 18.

¹⁰³ See Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Order on Reconsideration of the Second Report and Order*, FCC 99-3, at ¶¶ 6-8 (rel. January 21, 1999).

¹⁰⁴ The Commission has addressed the competitive bidding exemption for noncommercial educational broadcasters and sought further comment on whether mutually exclusive applications filed by noncommercial educational or public broadcast entities are exempt from competitive bidding regardless of whether the frequency applied for is reserved for noncommercial educational use or is a nonreserved "commercial" broadcast channel. *Commercial Broadcast Competitive Bidding First Report & Order*, 13 FCC Rcd at 15928-31 ¶¶ 20-25. Further comment on this issue has been sought in another rule making proceeding. See Reexamination of the Comparative Standards for New Noncommercial Educational Applicants, *Further Notice of Proposed Rule Making*, MM Docket No. 95-31, FCC 98-269 (rel. Oct. 21, 1998). To the extent the Commission determines that it is necessary to clarify the exemption for digital television or adopt implementing regulations for that exemption, we intend to do so in a proceeding specifically addressing broadcast services.

¹⁰⁵ Conference Report at 572.

language and legislative history, we tentatively conclude that "public safety radio services" should include, at a minimum, all of the Private Land Mobile Radio Services that are currently assigned to the Public Safety Radio Pool, which is comprised of those services formerly housed in the Public Safety Radio Services and the Special Emergency Radio Service.¹⁰⁶ The Public Safety Radio Services included the Local Government, Police, Fire, Highway Maintenance, Forestry-Conservation, and Emergency Medical Radio Services.¹⁰⁷ The Special Emergency Radio Service covered the licensing of radio communications of hospitals and clinics, ambulance and rescue services, veterinarians, persons with disabilities, disaster relief organizations, school buses, beach patrols, persons or organizations in isolated areas, and emergency standby and repair facilities for telephone and telegraph systems.¹⁰⁸ Thus, we propose to include the spectrum allocated to the Public Safety Radio Pool in our definition of "public safety radio services," because such spectrum is used for communications directly related to the safety of life, health, or property and is not made commercially available to the public.

28. We also tentatively conclude that our definition of "public safety radio services" should include the 24 MHz of newly allocated public safety spectrum at 764-776 MHz and 794-806 MHz (hereinafter "the 700 MHz band").¹⁰⁹ Licensing in the 700 MHz band is restricted to a more narrow class than licensing in the public safety radio services, which does not appear to be limited to particular entities.¹¹⁰ Moreover, the 700 MHz band, like public safety radio services spectrum, must be used to protect the safety of life, health, or property, and may not be made commercially available to the public.¹¹¹ We therefore seek comment on our tentative conclusion that spectrum in the 700 MHz band should be included within the public safety radio services spectrum that is exempt from competitive bidding.

29. Further, in the *220-222 MHz Third Report and Order*,¹¹² the Commission concluded that it would be in the public interest to allocate ten 220 MHz non-nationwide channel pairs for the exclusive use of public safety eligibles. Therefore, consistent with this decision, we tentatively conclude that our definition of public safety radio services should include the ten 220 MHz channel pairs. Similarly, in the *Maritime Third Report and Order*,¹¹³ we concluded that it would be in the public interest to set aside two contiguous channel pairs in each of the thirty-three inland VHF Public Coast areas (VPC) for public safety

¹⁰⁶ See 47 C.F.R. § 90.16.

¹⁰⁷ See 47 C.F.R. Subpart B, Note, former § 90.15.

¹⁰⁸ See 47 C.F.R. Subpart C, Note, former § 90.33.

¹⁰⁹ See Section 337(a) of the Communications Act, 47 U.S.C. § 337(a), as added by the Balanced Budget Act, § 3004.

¹¹⁰ See *infra* paragraph 39. See also Conference Report at 572.

¹¹¹ See 47 U.S.C. § 337(f)(1)(A), (C).

¹¹² Amendment of Part 90 of the Commission's Rules To Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Third Report and Order; Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 10943 at ¶ 61 (1997) ("*220-222 MHz Third Report and Order; Fifth Notice of Proposed Rulemaking*").

¹¹³ *Maritime Third Report and Order*, 13 FCC Rcd 19853 (1998).

users.¹¹⁴ Although we stated that the ultimate use for these reserved frequencies would be decided as part of our pending public safety proceeding,¹¹⁵ we concluded that these inland VPC channel pairs were a part of the public safety radio services that the Balanced Budget Act expressly exempted from competitive bidding.¹¹⁶ We tentatively conclude that we should continue to include the VPC spectrum that we have set aside for public safety uses in our definition of public safety radio services. We seek comment on our tentative conclusions.

30. In light of the exemption's focus on *public safety radio services* rather than certain classes of public safety licensees, we also seek comment on whether we should interpret the exemption to apply only to spectrum that the Commission specifically allocates to public safety radio services.¹¹⁷ Should we designate certain radio services or classes of frequencies within certain services as "public safety radio services" for which licenses will be assigned without competitive bidding? And, if such designations are warranted, upon what basis should we make such designations? Should, for example, such designations be based on the "principal use of the spectrum" as determined by the Commission, or would other bases be more appropriate? Additionally, we seek comment on whether there are any other private radio services or frequency bands that satisfy the criteria of the public safety radio services exemption, *i.e.*, that are used to protect the safety of life, health or property and that are not made commercially available to the public.¹¹⁸ For example, it appears that frequencies used by medical telemetry equipment may fall within this exemption.

1. Private Internal Radio Services

31. Private internal systems are traditionally operated by licensees that require highly customized mobile radio facilities for the conduct of the licensee's underlying business.¹¹⁹ In the *Competitive Bidding Second Report and Order*, the Commission concluded that the term "private services" refers to services "that were for internal use."¹²⁰ However, private internal services are a subclassification of private services, because some private services, such as the Amateur Radio Service and the Aviation Services, are not used for internal communications. Our Part 90 rules governing private land mobile radio services

¹¹⁴ Id. at 19868-69 ¶ 31.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 19882-83 ¶ 61.

¹¹⁷ *Cf. Commercial Broadcast Competitive Bidding First Report & Order*, 13 FCC Rcd 15920, 15928-31 ¶¶ 20-25 (Comment sought on whether competitive bidding exemption for noncommercial educational broadcast stations applies to mutually exclusive applications filed by noncommercial educational or public broadcast entities for nonreserved "commercial" broadcast channels as well as channels reserved for noncommercial educational use). *See also* Reexamination of the Comparative Standards for New Noncommercial Educational Applicants, MM Docket No. 95-31, *Further Notice of Proposed Rule Making*, 13 FCC Rcd 21167 (1998).

¹¹⁸ In the case of internal radio services that are used by emergency road services, Section 309(j)(2) imposes the additional requirement that the service provider be a not-for-profit organization.

¹¹⁹ *See* Implementation of Sections 3(n) and 332 of the Communications Act - Regulatory Treatment of Mobile Services, GN Docket No. 93-252, *Second Report and Order*, 9 FCC Rcd 1411, 1428 ¶ 44 (1994) ("*CMRS Second Report and Order*").

¹²⁰ *See Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 ¶¶ 23-25.

currently define an "internal system" as a system in which "all messages are transmitted between the fixed operating positions located on the premises controlled by the licensee and the associated mobile stations or paging receivers of the licensee."¹²¹

32. Because the Balanced Budget Act's exemption for public safety radio services includes "private internal radio services used by State and local governments and non-government entities," we seek comment on the definition of "private internal radio services". We recognize, for example, that for the purpose of implementing the public safety radio services exemption, our definition of "private internal radio services" will need to cover private fixed as well as private mobile radio services. We therefore propose to define private internal radio services by incorporating our definition of "private services"¹²² with our definition of internal systems in our Part 90 rules, and expanding the definition to include both fixed and mobile services. Accordingly, we seek comment on whether we should define a private internal radio service as a service in which the licensee does not receive compensation, and all messages are transmitted between fixed operating positions located on premises controlled by the licensee and the associated fixed or mobile stations or other transmitting or receiving devices of the licensee.

33. Additionally, we seek comment on whether our definition of private internal radio services should include services in which private internal systems operate on a cooperative or multiple-license basis. The term "private mobile service" as defined in Section 332(d)(3) of the Communications Act,¹²³ includes mobile service that may be licensed on an "individual, cooperative, or multiple basis."¹²⁴ In the *CMRS Second Report and Order*, the Commission observed that shared-use arrangements are beneficial because they allow radio users to combine resources to meet compatible needs for specialized internal communications facilities, and we decided that such arrangements would be deemed to be not-for-profit and presumptively classified as PMRS.¹²⁵ Private internal radio systems operating on a cooperative basis or as multiple-licensed systems would fall outside a definition of private internal radio services that was strictly based on the absence of compensation to the licensee, because such arrangements may involve cost reimbursements that could be considered compensation. Nevertheless, systems operated on a cooperative basis and multiple-licensed systems possess one of the most common characteristics of private internal radio systems: the systems are not operated as a direct source of revenue, but rather as a means of internal communications to support the day-to-day needs of the licensees' business operations or to protect the safety of their employees, customers, or the general public. Accordingly, we seek comment on whether licensees operating systems on a not-for-profit basis and under a cost-sharing agreement, on a cooperative basis, or as a multiple licensed system for internal communications to support their own operations should be classified as private internal radio services, and considered exempt, even though the licensee receives compensation.

a. Emergency Road Services

34. Section 309(j)(2)(A) stipulates that licenses issued for private internal radio services used by providers of emergency road services will be awarded without competitive bidding only if the service

¹²¹ 47 C.F.R. § 90.7

¹²² See *supra* note 38.

¹²³ 47 U.S.C. § 332(d)(3).

¹²⁴ 47 U.S.C. § 153(27).

¹²⁵ *CMRS Second Report and Order*, 9 FCC Rcd at 1430 ¶ 47.

provider is a not-for-profit organization.¹²⁶ The Conference Report that accompanied the legislation expresses Congress's intent through specific examples.

This service exemption also includes radio services used by not-for-profit organizations that offer emergency road services, such as the American Automobile Association (AAA). The Senate included this particular exemption in recognition of the valuable public safety service provided by emergency road services. The conferees do not intend this exemption to include internal radio services used by automobile manufacturers and oil companies to support emergency road services provided by those parties as part of the competitive marketing of their products.¹²⁷

This distinction between for-profit and not-for-profit entities is not required for any other user of public safety radio services.

35. We invite comment on how we should carry out Congress's intent regarding treatment of providers of emergency road services. Should we limit licensee eligibility in the public safety radio services by excluding emergency road service providers that are not organized as not-for-profit entities under the laws of the state in which they reside and/or provide such services? Alternatively, should we use the categories that are found in our regulations governing eligibility to hold authorizations in the Automobile Emergency Radio Service? Although both categories are eligible licensees under those regulations, we distinguish between operation of a private emergency road service for disabled vehicles by associations of owners of private automobiles¹²⁸ and the business of providing to the general public an emergency road service for disabled vehicles.¹²⁹ We seek comment on whether we should use similar definitions to distinguish between emergency road service providers that are eligible and noneligible to obtain auction-exempt licenses or permits for public safety radio spectrum.

b. State and Local Governments

36. In establishing eligibility for licensing in the newly-allocated public safety spectrum in the 700 MHz band, we concluded that all state and local government entities would be presumed eligible without further showing as to eligibility.¹³⁰ The Conference Report accompanying the Balanced Budget Act makes clear that Congress intended the public safety radio services exemption to be broader than the definition of "public safety services" eligible for licensing in the 700 MHz band.¹³¹ We therefore tentatively conclude that it would be consistent with legislative intent for the Commission to presume that all state and local government entities are eligible for licensing in the auction-exempt public safety radio services without further showing as to eligibility, subject to the statutory requirement that this spectrum be

¹²⁶ 47 U.S.C. § 309(j)(2) (as amended by Balanced Budget Act, § 3002(a)(1)(A)).

¹²⁷ Conference Report at 572.

¹²⁸ See 47 C.F.R. §§ 90.95(a)(1).

¹²⁹ See 47 C.F.R. §§ 90.95(a)(2).

¹³⁰ See The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements through the Year 2010, WT Docket No. 96-86, *First Report and Order and Third Notice of Proposed Rulemaking*, FCC 98-191, at ¶ 54 (rel. September 29, 1998) ("*Public Safety First Report and Order*").

¹³¹ See Conference Report at 572.

used to protect the safety of life, health or property and not made commercially available to the public. We seek comment on this tentative conclusion.

c. Non-government Entities

37. In establishing the eligibility of non-governmental organizations (NGOs) for licensing in the 700 MHz band, we concluded that NGOs must obtain written governmental approval to be eligible for licensing.¹³² However, as we observed above, Congress intended the public safety radio services exemption to be much broader than the definition of "public safety services" eligible for licensing in the 700 MHz band and eligible to invoke Section 337.¹³³ Unlike the definition of "public safety services," which requires NGOs to be authorized by a governmental entity whose primary mission is the provision of such services to be eligible for public safety spectrum in the 700 MHz band, the public safety radio services exemption in Section 309(j)(2) is not restricted to NGOs that are "authorized by a governmental entity."¹³⁴ In light of this distinction, we seek comment on whether we should establish any eligibility criteria for non-government entities to ensure that public safety radio services spectrum licensed to non-government entities is used to protect the safety of life, health, or property and not made commercially available to the public. Does the absence of this restriction on "non-government entities" in Section 309(j)(2)(A) suggest that non-government entities should not be required to obtain written governmental approval of their public safety radio service licenses, as they are required to do for licenses in the 700 MHz band?

38. We note that Section 309(j)(2)(A) exempts public safety radio services from auctions, but does not appear to restrict the entities that may apply for public safety radio services spectrum. We recognize that in some cases public safety entities may wish to obtain communications services on a contract basis from a commercial service provider. We invite comment as to whether it may be appropriate to permit commercial providers or other non-government entities that intend to provide public safety radio services on a contract basis to apply directly for auction-exempt spectrum, subject to the statutory requirement that this spectrum be used to protect the safety of life, health or property and not made commercially available to the public. If this were permitted, how might we ensure that this spectrum is used only to protect the safety of life, health, or property and not to provide non-qualifying services to the public?¹³⁵

2. Frequency Pools

39. The Commission provides a pool of frequencies for public safety radio services (*i.e.*, the Public Safety Pool). We recognize that the exemption for public safety radio services provided in Section 309(j)(2)(A) is broader than the criteria the Commission has applied in determining eligibility for frequencies in the Public Safety Pool. We invite comment on the ramifications of the revised Section

¹³² See *Public Safety First Report and Order* at ¶¶ 56-57.

¹³³ See Conference Report at 572.

¹³⁴ See 47 U.S.C. § 337(f)(1)(B)(ii).

¹³⁵ Cf. *Public Safety First Report and Order* at ¶ 72 (commercial providers of public safety services found eligible for licenses in the public safety spectrum in the 700 MHz band because Section 337(f)(1) defines the public safety services and not the entities for which such spectrum is reallocated).

309(j)(2)(A) on our assignment of frequencies for public safety radio services. We believe that it would be imprudent and potentially disruptive to current public safety communications to overhaul the existing frequency assignment approach for public safety pool spectrum. Therefore, we seek alternatives, such as establishing categories or frequency pools for various types of users of public safety radio services spectrum and allocating specific frequencies within the public safety radio services to each category or frequency pool.

40. We also seek comment on how such spectrum categories or pools should be defined if we were to decide to establish such categories or pools. Should a separate pool be established for state and local government licensees or for nonprofit organizations providing emergency road services? Based on our past experience, frequency pools can sometimes lead to inefficiencies where spectrum is exhausted in one pool but not another. If the Commission were to establish such a separate frequency pool, how should frequencies be apportioned with eligibles in the existing Public Safety Pool so that we can minimize inefficiencies?

41. UTC, The Telecommunications Association, the American Petroleum Institute, and the Association of American Railroads have submitted a rulemaking petition that includes a proposal to create a third radio pool, in addition to the Public Safety and Industrial/Business Radio Pools already used for private radio frequencies below 470 MHz, to be known as the Public Service Radio Pool and open to entities that do not qualify for Public Safety Radio Pool spectrum, but are eligible to use the public safety radio services that the Balanced Budget Act exempted from the Commission's auction authority.¹³⁶ We note that this approach may be feasible for other frequency bands, including PLMR frequencies above 470 MHz. We seek comment on this proposal.

42. Alternative proposals on ways to categorize public safety radio service spectrum and other PLMR spectrum also are welcome. Commenters discussing the creation of a third pool or any other means of separating auctionable from non-auctionable spectrum should consider the use of frequency coordination, the resolution of mutually exclusive applications, eligibility requirements, and the appropriate treatment of public safety radio service eligibles operating on frequencies not reallocated to the new pool, and of non-eligibles operating on frequencies that are reallocated. In addition, commenters are encouraged to submit specific quantitative information regarding the spectrum needs of public safety and non-public safety PLMR users. Necessary amendments to the Commission's Rules should also be noted.

3. Restrictions On Use

43. We also seek comment on what regulatory provisions should be established to ensure that the licensee's assigned frequencies continue to be utilized only for purposes that meet the requirements of the Balanced Budget Act's exemption from competitive bidding. For example, private wireless licensees using their systems noncommercially to protect the safety of their employees in the course of conducting routine business operations also would have the capability to use those systems for communications of a routine business nature. Section 309(j)(2)(A) requires that spectrum exempt from auctions under the public safety radio services exemption be used to protect the safety of life, health, or property and not be made commercially available to the public. In contrast, Section 337(f)(1)(A) requires spectrum in the 700

¹³⁶ See UTC, The Telecommunications Association, American Petroleum Institute, and Association of American Railroads Petition for Rulemaking at 19 (filed Aug. 14, 1998).

MHz band to be used for services "*the sole or principal purpose*" of which is to protect the safety of life, health, or property.¹³⁷

44. We seek comment on the scope of permissible uses for auction-exempt services. Does the absence of the words "or principal purpose" in Section 309(j)(2) signify that licensees in these services may use their frequencies only for safety-related purposes? Alternatively, should we permit licensees of auction-exempt spectrum to use their frequencies for ineligible as well as eligible purposes? If we were to allow public safety radio services to be used incidentally for purposes other than safety protection, what standard should we adopt to ensure that licensees that obtain these frequencies do not circumvent the statutory mandate that spectrum be licensed without competitive bidding only for the limited purposes expressed in Section 309(j)(2)?

4. Noncommercial Proviso

45. In addition to being used to protect the safety of life, health, or property, the public safety radio services exemption to our general auction authority requires that the radio services not be "made commercially available to the public."¹³⁸ Thus, private internal radio services that are made "commercially available to the public" would be required to be licensed through auctions. We sought comment above on whether commercial providers should be eligible for licenses in the public safety radio services, provided that they do not make the radio services commercially available to the public.¹³⁹ We now address how the term "not made commercially available to the public" should be defined.

46. In determining what Congress meant by radio services "not made *commercially* available,"¹⁴⁰ we are presented with some of the same considerations raised in our discussion of how to interpret "private internal radio services." One of the criteria Congress has used to distinguish commercial mobile radio services from private mobile radio services is whether service is provided for a profit.¹⁴¹ However, the Commission has found that the distinction between CMRS and PMRS is not relevant for purposes of determining the meaning of "private services" in the context of Section 309(j).¹⁴² Similarly, we believe that the distinction between CMRS and PMRS need not be determinative of how we define "not made commercially available" for purposes of the auction exemption in Section 309(j)(2). Accordingly, we seek comment on how we should interpret the prohibition against public safety radio services being made commercially available. Should we define "not made commercially available" to have the same meaning as "private internal," *i.e.*, that the radio services are not made available for compensation? If we adopt such a definition, should we also adopt an exception that would consider services to be not commercially available even though the licensee receives compensation, if the compensation is received under a nonprofit cost-sharing or cooperative agreement, or as a multiple licensed system?

¹³⁷ 47 U.S.C. § 337(f)(1)(A) (emphasis added).

¹³⁸ 47 U.S.C. § 309(j)(2)(A)(ii).

¹³⁹ See *supra* paragraph 38.

¹⁴⁰ 47 U.S.C. § 309(j)(2)(A)(ii) (emphasis added).

¹⁴¹ See 47 U.S.C. § 332(d).

¹⁴² See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2352 n.12.

47. In addition to seeking comment regarding shared use and multiple licensing with respect to the meaning of "not made commercially available," we also seek more general comment regarding multiple licensing. A "multiple-licensed" system, also known as a "community repeater," is a system for which the same transmitting equipment and spectrum is licensed to and used by more than one entity, each of whom is eligible in the same service.¹⁴³ If the station is interconnected with the public switched network, the telephone service must be provided on a cost-shared, non-profit basis, and detailed records must be maintained.¹⁴⁴ No consideration is paid, either directly or indirectly, by any participant to any other participant for or in connection with the use of the multiple-licensed facilities.

48. In 1992, the Commission proposed eliminating multiple licensing, on the grounds that, from a user's standpoint, such facilities were indistinguishable from SMR facilities, and that users' needs could adequately be met by SMR and private carrier licensees.¹⁴⁵ When the Commission implemented the 1993 Budget Act, however, it concluded that Congress recognized the benefits of allowing private radio users to enter into legitimate cost-sharing arrangements, and did not intend such arrangements to be classified as a "for-profit" CMRS service.¹⁴⁶ This conclusion was based upon the definition of "mobile service" adopted in the 1993 Budget Act, which defines "private" communications systems as systems that may be licensed on an "individual, cooperative, or multiple basis."¹⁴⁷ The Commission discerned that the legislative intent was to provide for shared-use¹⁴⁸ and multiple-licensed "private" communications systems, exempt from the competitive bidding process.¹⁴⁹

49. Thus, despite concern that these systems are often indistinguishable from commercial systems, the Commission deemed it appropriate to retain multiple licensing.¹⁵⁰ To ensure that only legitimate cost-sharing arrangements were treated as not-for-profit, the Commission continued to impose on licensees disclosure requirements to prevent PMRS licensees from providing *de facto* for-profit service in competition with CMRS providers. Nevertheless, the current licensing rules have sometimes resulted in *de facto* commercial mobile service operations by the managers of multiple licensed stations,

¹⁴³ Amendment of Parts 89, 91, 93, and 95 of the Commission's Rules to Adopt New Practices and Procedures for Cooperative Use and Multiple Licensing of Stations in the Private Land Mobile Radio Services, Docket No. 18921, *Memorandum Opinion and Order and Notice of Proposed Rule Making*, 24 FCC 2d 510, 511 ¶ 2 (1970) ("*Cooperative Use Memorandum Opinion and Order*"); see 47 C.F.R. § 90.185.

¹⁴⁴ 47 C.F.R. §§ 90.185(c), 90.477.

¹⁴⁵ Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Rules Governing Them, PR Docket No. 92-235, *Notice of Proposed Rule Making*, 7 FCC Rcd 8105, 8131 (1992).

¹⁴⁶ See *CMRS Second Report and Order*, 9 FCC Rcd at 1430 ¶ 47.

¹⁴⁷ *Id.* at 1430 n.75.

¹⁴⁸ A "shared-use" system is a system whereby a cooperative arrangement exists, where, with limitations, a station licensed to one eligible in a given service is used by other eligibles in the same service; or, in certain cases, a non-profit corporation or association is the licensee of the facilities used to provide service to persons engaged in eligible activities. *Cooperative Use Memorandum Opinion and Order*, 24 FCC 2d at 511 ¶ 2.

¹⁴⁹ See *CMRS Second Report and Order*, 9 FCC Rcd at 1430 ¶ 47.

¹⁵⁰ *Id.*

who were permitted, after the implementation of the 1993 Budget Act, to continue to assist in the operation of multiple-licensed systems.

50. A not-for-profit system structured to give an unlicensed manager sufficient operational control to provide for-profit service to customers without Commission approval is a violation of Section 310(d) of the Communications Act and our rules, for which the system license can be revoked.¹⁵¹ In addition, the licensee could be subject to reclassification as CMRS.¹⁵² *De facto* for-profit operations, on frequencies on which for-profit activities are prohibited, offends concepts of regulatory symmetry and interferes with the establishment of a level economic playing field.¹⁵³ Such sham not-for-profit operations compete with CMRS licensees who are required to obtain their licenses through competitive bidding. With the potential expansion of our auction authority to include private radio services, we think it is appropriate to revisit this issue. Accordingly, we seek comment on whether eliminating or modifying the multiple licensing rules would be appropriate.

51. In addition to seeking comment on the meaning of "not made commercially available," we also invite comment on how we should define radio services "not made commercially available to the public."¹⁵⁴ In the *CMRS Second Report and Order*,¹⁵⁵ the Commission determined the meaning of "available to the public"¹⁵⁶ in the context of defining commercial mobile radio service.¹⁵⁷ The Commission found in the CMRS proceeding that a service is available "to the public" if it is offered to the public without restriction on who may receive it.¹⁵⁸ However, because in that rule making the Commission was determining the meaning of *commercial* mobile service, as defined in Section 332(d) of the Communications Act, it was required to include in its definition those services that are "effectively available to a substantial portion of the public."¹⁵⁹ The Commission found that if service is provided exclusively for internal use or is offered only to a significantly restricted class of eligible users, it is made available only on a limited basis to insubstantial portions of the public.¹⁶⁰ Examples of services cited as being available only to insubstantial portions of the public were the Public Safety Radio Services, Special Emergency Radio Service, Radiolocation Services, most of the Industrial Radio Services, Maritime

¹⁵¹ 47 U.S.C. § 310(d).

¹⁵² See *CMRS Second Report and Order* at 1431 ¶ 49.

¹⁵³ The Commission's efforts to implement the congressional intent of creating regulatory symmetry among similar mobile services was noted in 1994 when the Commission implemented the 1993 Budget Act. See *id.* at 1413 ¶ 2.

¹⁵⁴ 47 U.S.C. § 309(j)(2)(A)(ii) (emphasis added).

¹⁵⁵ *CMRS Second Report and Order*, 9 FCC Rcd 1411 (1994).

¹⁵⁶ 47 U.S.C. § 332(d)(1)(A).

¹⁵⁷ *CMRS Second Report and Order*, 9 FCC Rcd at 1439 ¶ 65.

¹⁵⁸ *Id.*

¹⁵⁹ 47 U.S.C. § 332(d)(1)(B).

¹⁶⁰ *CMRS Second Report and Order*, 9 FCC Rcd at 1440 ¶ 67.

Service Stations, and Aviation Service Stations.¹⁶¹ We seek comment on whether we should interpret the requirement that public safety radio services not be made commercially available to the public to mean that such services may be made available only to an insubstantial portion of the public. Under such a definition, a public safety radio service could not be made available to the public without restriction *or* to any substantial portion of the public.

5. Resolution of Mutually Exclusive Applications for Services Exempt from Competitive Bidding

52. If applications for auction-exempt public safety radio services were to continue to be frequency coordinated prior to their filing with the Commission, we would expect that under either site-based or geographic area licensing, incidents of mutual exclusivity in these services would be rare. However, because it is possible for mutual exclusivity to arise, we seek comment below on how we should avoid or resolve mutual exclusivity between applications for spectrum exempt from competitive bidding.

53. We seek comment on whether engineering solutions, negotiation, threshold qualifications, service regulations, or other means should be used to resolve mutual exclusivity in cases where frequency coordination is unsuccessful in avoiding mutually exclusive applications. As noted previously, the Balanced Budget Act terminated the Commission's authority to use lotteries to choose among mutually exclusive applications.¹⁶² Therefore, we are foreclosed from using random selection in the event we receive mutually exclusive applications for licenses to use channels in a public safety radio service. Two of the remaining methods by which we could resolve such applications are comparative hearings and licensing on a first-come-first-served basis. We seek comment on these and other possible alternatives to resolving such applications in public safety radio services.

6. Application of Section 337

54. In addition to the statutory exemption for public safety radio services, providers of public safety services may obtain spectrum without engaging in competitive bidding if they are granted the use of a frequency under Section 337. Section 337, among other things, gives eligible providers of public safety services a means to obtain unassigned spectrum not otherwise allocated for public safety purposes.¹⁶³

55. In considering applications under Section 337, the Commission must make an initial determination as to whether the applicant is an "entity seeking to provide public safety services,"¹⁶⁴ which the statute defines as "services --

(A) the sole or principal purpose of which is to protect the safety of life, health, or property;

(B) that are provided --

(i) by State or local government entities; or

(ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and

¹⁶¹ *Id.*

¹⁶² *See* Balanced Budget Act § 3002(a)(2)(B)(5).

¹⁶³ *See* 47 U.S.C. § 337(c)(1).

¹⁶⁴ *Id.*

(C) that are not made commercially available to the public by the provider."¹⁶⁵

56. The Commission must grant applications filed pursuant to Section 337 if an eligible applicant demonstrates that (a) no other spectrum allocated to public safety services is immediately available to satisfy the requested use, (b) the requested use will not cause harmful interference to other spectrum users entitled to protection from such interference, (c) the use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in that geographic area, (d) the unassigned frequency has been allocated for its present use for at least two years, and (e) granting the application is in the public interest.¹⁶⁶ If an applicant's showing fulfills these criteria, the Commission must then waive any requirement of its regulations or the Communications Act (other than regulations regarding harmful interference) to the extent necessary to permit the requested use.¹⁶⁷ After analysis and consideration of these criteria, the Commission must either disapprove the request or assign the specifically requested spectrum to the applicant. The statutory criteria indicate that an eligible applicant must request specific unassigned frequencies.¹⁶⁸ Thus, we tentatively conclude that an eligible entity must specify the spectrum it seeks to use, and cannot simply apply for the assignment of *any* unassigned spectrum and require the Commission to locate and select an appropriate frequency. If any one of the five criteria is unfulfilled, the application will not be granted.

57. We seek comment on our application of the statutory criteria. We particularly seek comment regarding the showing necessary to demonstrate that the grant of the application would be in the public interest, and the requirement that the frequency applied for be "unassigned." Specifically, we request comment on whether it would be in the public interest for applicants seeking to provide public safety services to apply for frequencies that, while not yet licensed to another entity, have already been identified and designated by the Commission as frequencies to be licensed by auction.¹⁶⁹

¹⁶⁵ 47 U.S.C. § 337(f)(1).

¹⁶⁶ 47 U.S.C. § 337(c)(1). Thus far, the Commission has considered and granted one application under subsection 337(c). See *In the Matter of License Communications Services, Inc., South Bay Regional Public Communications Authority, and Paging Systems, Inc., Memorandum Opinion and Order*, FCC 98-162 (rel. July 30, 1998). In so doing, the Commission advised that such requests should: (1) be in writing and accompanied by a completed application; (2) be from a state or local government entity or a nongovernmental organization authorized to provide public safety services, as defined by Section 337(f)(1), by a government entity whose primary mission is the provision of such services; (3) expressly seek relief under Section 337; (4) fully describe the public safety services the applicant is seeking to provide, including whether their sole or primary purpose is the protection of the safety of life, health or property, and whether the services are made commercially available to the public by the applicant; (5) specifically identify the requirements of the Communications Act and all of the Commission's Rules which must be waived in order to permit the proposed assignment and use; (6) provide sufficient information, in such detail as may be required to enable the Commission to make the findings outlined in 47 U.S.C. § 337(c); and (7) be filed with the Commission as required under the rules governing PLMR Services applications not requiring fees. *Id.* at ¶ 41.

¹⁶⁷ 47 U.S.C. § 337(c)(1).

¹⁶⁸ See 47 U.S.C. § 337(c)(1)(C), (D) (referring to "the unassigned frequency").

¹⁶⁹ See, e.g., Hennepin County, Minnesota, Application for License Pursuant to Section 337 of the Communications Act of 1934 (filed January 11, 1999). See also Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Order on Reconsideration of the Second Report and Order*, FCC 99-3, at ¶ 6 (rel. January 21, 1999).

D. Establishing the Appropriate Licensing Scheme

1. Obligation to Avoid Mutual Exclusivity

58. We next inquire about how the revisions to Sections 309(j)(1) and 309(j)(2) affect our licensing obligations and methodologies. As discussed above, the Balanced Budget Act makes the acceptance of mutually exclusive license applications the only criterion for auctionability, subject to the obligation to avoid mutual exclusivity.¹⁷⁰ We note that because services previously determined to be nonauctionable are generally licensed by processes that do not result in the filing of mutually exclusive license applications, unless we alter these licensing schemes, licenses in these services will not be auctionable under the Balanced Budget Act.¹⁷¹

59. The Balanced Budget Act of 1997 simplified our determinations of which services are auctionable under Section 309(j). Section 309(j)(2) no longer requires us to base our determinations on whether the service is used principally for subscriber-based services. Unless a service is expressly exempted, subject to its obligation under Section 309(j)(6)(E) avoid mutual exclusivity in the public interest, the Commission is required to assign initial licenses by auctions when it has accepted mutually exclusive applications for such licenses. Thus, if not exempted by the statute, a service will be auctionable if the Commission implements a licensing process that permits the filing and acceptance of mutually exclusive applications.

60. In revising our auction authority, Congress retained and highlighted our obligation under Section 309(j)(6)(E) to continue to use various means to avoid mutual exclusivity."¹⁷² We seek comment on whether the express reference to the Commission's obligation under Section 309(j)(6)(E) in the general auction authority provision changes the scope or content of that obligation. In addition, we note that the Balanced Budget Act has not altered the criteria in Section 309(j)(3) that we must use to determine that a particular licensing scheme is in the public interest. In establishing licensing schemes or methodologies under the Balanced Budget Act (for both new and existing, commercial and private services), how should we apply the public interest factors in Section 309(j)(3)? With respect to services currently using licensing schemes in which mutually exclusive applications are not filed, did Congress, in emphasizing our obligation to avoid mutual exclusivity, intend that we give greater weight to that obligation and less to other public interest objectives?¹⁷³

61. The Commission has previously interpreted Section 309(j)(6)(E) to impose an obligation to avoid mutual exclusivity in defining licensing schemes for commercial services only when it would further

¹⁷⁰ See *supra* paragraph 25.

¹⁷¹ See *supra* paragraphs 10-17.

¹⁷² 47 U.S.C. §§ 309(j)(1) and (j)(6)(E). Additionally, in the Conference Report, Congress specifically focused on our obligation not to overlook engineering solutions and other tools that could avoid mutual exclusivity. See H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572. See also Letter to Chairman William E. Kennard from Rep. John D. Dingell, Rep. W. J. Tauzin, Sen. Tom Daschle, Sen. John B. Breaux, Sen. Spencer Abraham, and Sen. Slade Gorton (December 22, 1998).

¹⁷³ See generally *DIRECTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997) (Section 309(j)(6)(E) does not require Commission to adhere to policy it deems outmoded in order to avoid mutual exclusivity in licensing proceedings).

the public interest goals of Section 309(j)(3).¹⁷⁴ For example, in the 800 MHz Specialized Mobile Radio ("SMR") service, after considering the appropriateness of other license assignment methods, the Commission concluded that those other methods were not in the public interest and that competitive bidding was the most appropriate method of assigning licenses because it would allow the most expeditious access to the spectrum.¹⁷⁵ The Commission formerly used site-by-site licensing and a "first-come, first-served" license assignment method in the 800 MHz SMR service for channels that were primarily used to provide dispatch radio service. In recent years, however, a number of SMR licensees have expanded the geographic scope of their services, aggregated channels, and developed digital networks to enable them to provide a type of service comparable to that provided by cellular and PCS operators.¹⁷⁶ The Commission found site-by-site licensing procedures cumbersome for systems comprised of several hundred sites, and was concerned that site-by-site licensing impaired an SMR licensee's ability to respond to changing market conditions and consumer demand.¹⁷⁷ The Commission therefore replaced site-specific licensing with geographic area licensing and adopted competitive bidding procedures for the upper 200 channels in the 800 MHz SMR band.¹⁷⁸ On reconsideration of its decision, the Commission rejected arguments by petitioners contending that Section 309(j)(6)(E) prohibits it from conducting an auction unless it first attempts alternative licensing mechanisms to avoid mutual exclusivity.¹⁷⁹

¹⁷⁴ See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *Second Report and Order*, 12 FCC Rcd 19079, 19104 ¶ 62, 19154 ¶ 230 (1997) ("*800 MHz Second Report and Order*"). See also Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order and Second Notice of Further Rule Making*, 12 FCC Rcd 18600, 18647 ¶ 101 (1997) ("*39 GHz Report and Order*").

¹⁷⁵ See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd 9972, 10009-10010 ¶ 115 (1997) ("*800 MHz MO & O*") (Section 309(j)(6)(E) does not prohibit Commission from conducting an auction without first attempting alternative licensing mechanisms to avoid mutual exclusivity).

¹⁷⁶ See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, *First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making*, 11 FCC Rcd 1463, 1474 ¶ 4 (1995) ("*800 MHz First Report and Order*").

¹⁷⁷ See *id.* See also *CMRS Third Report and Order*, 9 FCC Rcd 7988, 8042-43 ¶¶ 94-97. The Commission also found that licensing 800 MHz spectrum in contiguous blocks would make SMR systems more competitive with other CMRS systems by maximizing technical flexibility so that, for example, it would be possible for SMR licensees to deploy spread spectrum and other broadband technologies. See *CMRS Third Report and Order*, 9 FCC Rcd at 8046 ¶ 103.

¹⁷⁸ See *800 MHz First Report and Order*, 11 FCC Rcd at 1476-1480 ¶¶ 9-14 (site-specific licensing replaced with geographic area licensing in upper 200 channels in the 800 MHz SMR band). See also *Fresno Mobile Radio, Inc. v. FCC*, No. 97-1459 (D.C. Cir. Feb. 5, 1999) (Commission acted within its discretion in deciding to award geographic area licenses in the 800 MHz SMR band by auction).

¹⁷⁹ See *800 MHz MO & O*, 12 FCC Rcd at 10009-10010 ¶ 115. See also Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, *Report and Order*, 9 FCC Rcd 5936 (1994) ("*Big LEO Report and Order*"). In licensing the low-Earth orbit satellite service in the bands above 1 GHz ("Big LEO" satellite service), applicants in a negotiated rule making were unable to reach agreement on spectrum sharing plan that avoided mutual exclusivity among all applicants. See *id.* at 5943 ¶ 9. Although several applicants contended that the statute forbids the Commission from conducting an auction until it has used every means to attempt to eliminate mutual exclusivity, the Commission rejected this argument, construing Section 309(j)(6)(E) to mean that the Commission is obliged to attempt to

62. In licensing direct broadcast satellite ("DBS") channels, the Commission similarly determined that it would best serve the public interest to reassign reclaimed DBS channels by auction.¹⁸⁰ This decision was based on a conclusion that the pro rata distribution of reclaimed channels among existing permittees would result in too few channels to provide any single permittee sufficient capacity for a viable system.¹⁸¹ The Commission therefore decided that even if reassigning channels on a pro rata basis could avoid mutual exclusivity, it would be more consistent with the public interest to award the channels by auction, in a block large enough to provide competitive DBS service.¹⁸² The U.S. Court of Appeals upheld this decision, ruling that Section 309(j)(6)(E) does not require that the Commission adhere to a particular licensing scheme or methodology that is not found to serve the public interest in order to avoid mutual exclusivity in licensing proceedings.¹⁸³ The court of appeals held that the statutory obligation to avoid mutual exclusivity requires the Commission to do so within the framework of its existing policy of promoting competition and prompt provision of DBS service.¹⁸⁴

63. We note that our decisions to establish geographic licensing have affected our balancing of our Section 309(j)(6)(E) obligation with the public interest objectives in Section 309(j)(3). Under the 1993 Budget Act, the Commission implemented its auction authority by establishing geographic licensing¹⁸⁵ for particular auctionable services,¹⁸⁶ finding in each case that such a licensing scheme

eliminate mutual exclusivity, rather than avoid mutual exclusivity in every instance in which it arises. *See id.* at 5966 ¶¶ 70-71. Ultimately, the subject licenses were not assigned by auction, because the dismissal of one applicant eliminated mutual exclusivity among the five remaining applicants for five available licenses. *See Application of Mobile Communications Holdings, Inc., Order and Authorization*, 12 FCC Rcd 9663, 9673 ¶ 24 (1997).

¹⁸⁰ *See DBS Report and Order*, 11 FCC Rcd 9712, 9764 ¶ 134, 9779 ¶ 165.

¹⁸¹ *See DBS Report and Order*, 11 FCC Rcd at 9764-65 ¶ 134-36.

¹⁸² *Id.* at 9764-65 ¶ 134-36, 9770-71 ¶ 147.

¹⁸³ *See DIRECTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997).

¹⁸⁴ *Id.*

¹⁸⁵ Geographic licensing is the use of pre-defined geographic license service areas. In CMRS services, the Commission has used several different geographic definitions, including Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) (*see* 47 C.F.R. § 22.909), Rand McNally's copyrighted (*see* Rand McNally, Inc., *Commercial Atlas & Marketing Guide*, 123rd Edition, pp. 38-39 (1992)) definitions of 487 Basic Trading Areas (BTAs) (*see* 47 C.F.R. §§ 21.924, 24.202, 101.1007) and 47 Major Trading Areas (MTAs) (*see* 47 C.F.R. §§ 24.202, 90.661), and the 172 Economic Areas (EAs) (*see* 47 C.F.R. §§ 90.7, 90.761) developed by the Bureau of Economic Analysis of the United States Department of Commerce (*See* "Final Redefinition of the BEA Economic Areas," 60 Fed. Reg. at 13,114, 13,114-118 (March 10, 1995) ("*Department of Commerce Economic Analysis on Economic Areas*").

¹⁸⁶ We note that in adopting competitive bidding procedures to select among mutually exclusive applicants for commercial analog broadcast service and Instructional Television Fixed Service (ITFS) licenses, we retained site-based licensing. *See Commercial Broadcast Competitive Bidding First Report & Order*, 13 FCC Rcd 15920 (1998). Licenses for cellular unserved areas subject to auction are also site-based. The unserved areas were created from the geographic area not covered by the Cellular Geographic Service Area ("CGSA") of each licensee. *See* Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, Amendment of Part 22 of the Commission's Rules to Provide for the Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, CC Docket No.

furthered the public interest objectives of efficient spectrum use, expeditious licensing, and rapid delivery to the public of new technologies and services as expressed in Section 309(j)(3).¹⁸⁷ In particular, the Commission found that pre-defined geographic service areas for many services have significant advantages over site-by-site licensing. The Commission has also found that licensing by geographic area facilitates aggregation by licensees of smaller service areas into seamless regional and national service areas and allows development of strategic regional and national business plans.¹⁸⁸ In addition, the Commission has found that geographic area licensing provides licensees with greater buildout flexibility and is easier for the Commission to administer.¹⁸⁹ For a number of services, these changes represent dramatic reductions in the regulatory burdens on both licensees and the Commission.¹⁹⁰ The Commission made these findings

90-6, *Ninth Report and Order*, 11 FCC Rcd 14769, 14770 ¶ 1 (1996). The CGSA is the geographic area within a Metropolitan Statistical Area (MSA) or Rural Service Area (RSA) that is served by an authorized cellular system, and it is a composite of the service areas of all of the system's cells within the MSA or RSA. See 11 FCC Rcd at 14770 n.3; 47 C.F.R. § 22.911. Thus, the cellular unserved areas are generally within standard geographic areas such as MSAs and RSAs, but they are site-specific because they are based on the technical parameters of authorized existing and proposed facilities. In this *Notice*, we do not propose to change the licensing scheme for broadcast services, ITFS, or unserved areas in the Cellular Radiotelephone Service.

¹⁸⁷ See, e.g., *800 MHz Second Report and Order*, 12 FCC Rcd at 19083 ¶ 3 (1997); *39 GHz Report and Order*, 12 FCC Rcd at 186010 ¶ 13, 18647 ¶ 101 (1997); *CMRS Third Report and Order*, 9 FCC Rcd at 8044 ("Assigning channel blocks in Commission-defined service areas eliminates the need for many of the complicated and burdensome licensing procedures that have hampered SMR development in the past"). The Commission also has found that in some instances the use of geographic area licensing and competitive bidding avoids unnecessary mutual exclusivity. For the Local Multipoint Distribution Service, in which the Commission established discrete geographic service areas to be licensed by competitive bidding, the Commission found that the use of geographic area licensing fulfilled our obligation under Section 309(j)(6)(E), because geographic service areas would avoid overlapping applications for essentially different service areas, which create the potential for "daisy chains" of mutually exclusive applications. See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Third Notice of Proposed Rulemaking and Supplemental Tentative Decision*, 11 FCC Rcd 53, 102 ¶ 134 (1995) ("*LMDS Third Notice*").

¹⁸⁸ See Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Memorandum Opinion and Order*, 9 FCC Rcd 4957, 4988 ¶ 78 (1994); Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Second Report and Order*, 8 FCC Rcd 7700, 7732 ¶ 74, 7734 ¶ 78 (1993).

¹⁸⁹ See, e.g., Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732, 2744 ¶ 15 (1997) ("*Paging Second Report and Order*").

¹⁹⁰ For example, in the rule making proceeding implementing competitive bidding to award licenses in the 39 GHz band, the Commission concluded that predetermined service areas provide a more orderly structure for the licensing process and foster efficient utilization of the spectrum in an expeditious manner. *39 GHz Report and Order*, 12 FCC Rcd at 18647 ¶ 101. The Commission observed that the use of site-based licensing and applicant-defined service areas can actually slow the delivery of services because the processing of each application requires extensive analysis and review by Commission staff. *Id.* In contrast, geographic area licensees may add, remove, or relocate sites within the geographic area without prior Commission approval. Geographic area licensing thus provides operational flexibility for licensees, because as a licensee's operations grow, an increased number of sites can be operated within the geographic area without the need for additional licenses. See, e.g., *800 MHz Second Report and Order*, 12 FCC Rcd 19079, 19087 ¶ 10. See also, *800 MHz MO & O*, 12 FCC Rcd 9972, 9977-78 ¶ 12. For most existing services,

even though geographic licensing could lead to the filing of mutually exclusive applications, which, under Section 309(j)(6)(E), the Commission has an obligation to attempt to avoid.¹⁹¹

64. Against this historical backdrop, we seek comment on whether the Commission's previous analysis of its obligation under Section 309(j)(6)(E) is still appropriate in view of the revisions to Section 309(j)(1) and 309(j)(2). When choosing a licensing scheme for new services and in deciding whether to change the licensing scheme for existing services, should we continue to evaluate our obligation to avoid mutual exclusivity by weighing the public interest objectives of Section 309(j)(3)?¹⁹² Alternatively, does the specific incorporation in Section 309(j)(1) of the Commission's obligation under Section 309(j)(6)(E) suggest an independent obligation to pursue strategies that avoid mutual exclusivity?

2. Exclusion of Satellite Services

65. We specifically note that the authorization of satellite services, due to international concerns, may justify the use of licensing procedures that provide a means to continue to avoid mutual exclusivity. The Commission has found in two instances that auctions of satellite licenses would serve the public interest.¹⁹³ In both cases, the spectrum in question had been identified in international treaties as uniquely within the regulatory authority of the United States.¹⁹⁴ Most other satellite systems, however, operate in frequency bands not similarly identified, which are allocated for mobile satellite services on a world-wide basis. As a consequence, how much money entities might bid and even their willingness to bid at all will be affected by the degree of their interest in providing global service and by their expectations concerning licensing requirements and costs in other countries. For example, a satellite system operator proposing to serve only the United States may be willing to bid higher for a U.S. license than a satellite system operator proposing to serve multiple regions, because the U.S.-only system would face considerably fewer contingencies. Thus, auctions might prevent entry by satellite systems interested in providing global service, even though these systems may provide services valued more highly by consumers. Coordinated multinational auctions might properly address the interdependency between national licensing decisions and international provision of service. However, international arrangements for transnational use of such frequency bands currently are premised on coordination -- using engineering solutions and other methods to avoid harmful interference -- among systems. A coordinated multilateral auction is likely to demand

licensee are subject to requirements regarding interference protection and construction of their systems. *See, e.g.*, 47 C.F.R. §§ 24.203, 24.237, 25.133, 25.135, 27.14, 27.58, 90.155, 90.167, 90.205, 90.307, 90.665, 90.725, 90.727, 90.771.

¹⁹¹ *See* Revision of Rules and Policies for the Direct Broadcast Satellite Service, IB Docket No. 95-168, *Report and Order*, 11 FCC Rcd 9712, 9764-65 ¶¶ 134-36, 9770-71 ¶ 147, 9779 ¶ 165 (1995) ("*DBS Report and Order*").

¹⁹² *See* H.R. Rep. No. 103-111, 103d Cong., 1st. Sess., at 258-259 (1993) (indicating that the Commission should use tools that avoid mutual exclusivity "when feasible and appropriate").

¹⁹³ *See* Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, IB Docket No. 95-91, *Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rule Making*, 12 FCC Rcd 5754, 5814-15 ¶¶ 149-150 (1997); *DBS Report and Order*, 11 FCC Rcd at 9779 ¶165.

¹⁹⁴ *See* Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, IB Docket No. 95-91, *Notice of Proposed Rulemaking*, 11 FCC Rcd 1, 3 n.2 (1995); Revision of Rules and Policies for the Direct Broadcast Satellite Service, IB Docket No. 95-168, *Notice of Proposed Rulemaking*, 11 FCC Rcd 1297, 1304 n.27 (1995).

substantial time and resources by multiple administrations, could raise national sovereignty and other spectrum access issues, and thus, could substantially delay service to the public. Thus, bearing in mind the goals of Sections 309(j)(3)(A), (B) and (D), the Commission has undertaken considerable efforts to develop solutions that would avoid mutual exclusivity among satellite systems.¹⁹⁵ For these reasons, we are not seeking comment in this proceeding on satellite services. Nor are any conclusions we reach in this proceeding intended to constrain our discretion under Section 309(j)(6)(E) as it relates to satellite services, or to specify any particular process for resolution of potential mutual exclusivity among satellite service applications.¹⁹⁶

3. Considerations of License Scope

66. We next seek comment on several issues that may influence our choice of a licensing scheme in some of the frequency bands currently being licensed in ways that do not allow the filing of mutually exclusive applications. We ask whether the use of geographic area licensing in these bands would be feasible and whether geographic area licensing or another licensing scheme would better serve our public interest goals. In services or classes of frequencies for which we may ultimately adopt geographic area licensing, we seek comment on how to convert existing licensing to geographic licensing and on the size of the licensing area that would be desirable.

67. In light of Congress's mandate to use competitive bidding to promote rapid provision of new services to the public without administrative delay, we seek comment on whether resolution of mutually exclusive applications on a "per station" basis is feasible. Would the use of geographic area licensing speed assignment of new channels and facilitate further build-out of wide-area systems?¹⁹⁷ Specifically, we seek comment on the costs and benefits of geographic licensing in the frequency bands discussed above.¹⁹⁸ What are the likely effects on incumbent systems and potential new entrants for such services if geographic area licensing is utilized? We also seek comment on whether any of the shared bands are so heavily used that adopting a geographic area licensing scheme would serve no purpose, because so little

¹⁹⁵ See, e.g., Amendment of Part 25 of the Commission's Rules to Establish Rules and Policies Pertaining to the Second Processing Round of the Non-Voice, Non-Geostationary Mobile Satellite Service, IB Docket No. 96-220, *Report and Order*, 13 FCC Rcd 9111 (1997) (Commission adopts applicants' mutually agreed upon spectrum sharing arrangement); Rulemaking to Amend Part 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *First Report and Order and Fourth Notice of Proposed Rulemaking*, 11 FCC Rcd 19005 (1996) (Commission adopts final Ka-band arrangement, the culmination of discussions with interested parties and filings in the proceeding).

¹⁹⁶ See Conference Report at 572. The Conference Report noted that the Balanced Budget Act's omission of an auction exemption for global satellite services should not be construed as a Congressional endorsement of auctions for those services. *Id.* The Conference Report stated that the treatment of global satellite systems raises numerous public policy questions beyond the issue of spectrum auctions, which are better handled in the context of substantive legislation rather than budget legislation. *Id.*

¹⁹⁷ See *supra* paragraph 63.

¹⁹⁸ See *supra* paragraphs 10-17.

"white space" would be available to geographic area licensees that there would be no interest in applying for the geographic area licenses.

68. We seek comment in particular on the PLMRS frequencies below 470 MHz that are licensed on a shared basis and are heavily used by many smaller PLMRS licensees. We recently completed a complex multi-year proceeding to maximize spectrum efficiency in these bands through engineering solutions.¹⁹⁹ In light of the extensive modifications to our regulatory and technical framework adopted to further the efficient use of these bands, we seek comment on whether the public interest would best be served by retaining the current licensing scheme rather than adopting geographic licensing and competitive bidding.

69. We note that some of the spectrum currently allocated for private internal use is also used to provide subscriber-based services, pursuant to intercategory sharing²⁰⁰ or rule waiver.²⁰¹ Similarly, for some frequencies licensed on a shared basis, a licensee can nonetheless obtain exclusive use of a frequency by meeting certain loading requirements.²⁰² Thus, we seek comment on whether, in deciding if geographic area licensing would be appropriate for a given radio service or class of frequencies, we should consider the actual purpose for which the spectrum is used or proposed to be used, as well as the purpose for which the spectrum is currently allocated.

70. For services in which we decide to adopt competitive bidding, is there a licensing scheme that we could use as an alternative to geographic area licensing? Are there any services in which we presently use site-specific licensing that we should continue to license on a site-by-site basis? We note, in particular, that some private users have argued that their unique geographic coverage requirements make it difficult for these needs to be met through geographic area licensing schemes. We also seek comment on how, assuming geographic area licensing is used, its implementation could affect the private land mobile radio frequency coordination process. We observed in the *39 GHz Report and Order* that frequency coordination techniques for emerging point-to-point technologies are no longer adequate.²⁰³ When geographic area licenses are to be awarded through competitive bidding, what role, if any, should the frequency coordinators serve? In which services and frequency bands, and on what conditions would frequency coordination continue to serve the public interest?

71. We also seek comment on ways in which we might convert existing licensing to geographic licensing. A Petition for Rulemaking filed by the American Mobile Telecommunications Association,

¹⁹⁹ The Commission consolidated twenty radio services into two pools in order to allow users access to a larger set of frequencies, and established a narrowband channel plan that, over a ten-year transition period, reduces the permissible channel width from 25 kHz to 12.5 kHz or less. See *Refarming Second Report and Order*, 12 FCC Rcd at 14315-17 ¶¶ 15-19; *Refarming Report and Order*, 10 FCC Rcd 10076, 10080-81 ¶ 7.

²⁰⁰ Permitting a licensee's use of frequencies outside a category for which it is eligible is referred to as intercategory sharing. State of South Carolina, *Order* 13 FCC Rcd 8787, 8789 ¶ 2 (WTB 1997).

²⁰¹ See, e.g., Wireless Telecommunications Bureau Seeks Comment on Nextel Communications, Inc. Waivers Requests Associated with Its Proposed Acquisition of Private Mobile Radio Service Business Channels, *Public Notice*, DA 98-2206 (WTB rel. Oct. 28, 1998); Southern Company, *Memorandum Opinion and Order*, DA 98-2496 (WTB rel. Dec. 4, 1998).

²⁰² See 47 C.F.R. §§ 90.625(a), 90.631, 90.633.

²⁰³ *39 GHz Report and Order*, 12 FCC Rcd at 18647 ¶ 101.

Inc., (AMTA) proposes to require most Part 90 licensees in the bands between 222 MHz and 896 MHz, excluding Public Safety licensees, to use technology that achieves the equivalent of one voice path per 12.5 kHz of spectrum, using a 25 kHz frequency, and to involuntarily modify to secondary status the licenses of licensees that fail to meet this requirement after a transition period.²⁰⁴ Alternatively, we could deal with licensees that fail to migrate to more efficient equipment by relocating them to shared frequency bands, which would be more compatible with the incumbents' present use because it would prevent inefficient users from benefiting from the capacity created by other, more spectrum-efficient, licensees. Relocating incumbents to shared spectrum might also be appropriate for site-based incumbents in bands that are converted to geographic area licensing, for similar reasons of compatibility. We seek comment on the use of relocation to facilitate the conversion of spectrum to geographic licensing.

72. Because we believe that the geographic definition used should correspond as much as possible to the geographic area that licensees seek to serve, we propose to establish the size of geographic licensing areas in service-specific proceedings, as we have done in the past. However, we seek comment on whether smaller geographic areas would be desirable for private internal radio services, because they would best approximate the service area desired by the small businesses and other users that typically characterize the private radio services. We also seek comment on whether in any of the services that will be subject to competitive bidding for the first time, it would be beneficial to establish geographic licensing areas smaller than EAs. Are there any other geographic boundaries that could be used to establish smaller geographic licensing areas, such as the boundaries of existing counties or boundaries established by the U.S. Postal Service to assign zip codes?

73. The Commission has found the short-form application process used in conjunction with our auctions to be the most efficient means of determining if mutual exclusivity exists. We seek comment on whether, in those services or classes of services, if any, for which we will be required to assign licenses by competitive bidding, we should continue to use a short-form application process to determine which license applications are mutually exclusive. We seek comment on whether there is a cost-effective alternative to use of the short-form application process as a means of determining when applications are mutually exclusive. We also seek comment on whether there are any other auction designs or procedures, or service regulations that could be used to limit the occurrence of mutual exclusivity in services that have become auctionable under our expanded authority.

74. Finally, we note that the Commission traditionally has established licensing on a service-specific basis, taking into account the particular characteristics of the service, including its purposes and the technology to be used. Similarly, although the Commission adopted a uniform set of competitive bidding rules in the *Part 1 Third Report and Order*, to provide for a more consistent and efficient licensing process for all auctionable services, we also indicated that we would continue to adopt service-specific auction procedures where we find that our general competitive bidding procedures are inappropriate.²⁰⁵ Thus, although we seek comment in this *Notice* on the licensing schemes and various aspects of auction design and methodology that should be applied to services newly auctionable under the revised statute, we recognize that many issues are more appropriately addressed on a service-specific basis. We may therefore use service-specific proceedings to tailor licensing, service, and auction rules of specific services or classes of services to implement decisions ultimately taken in this and any subsequent dockets.

²⁰⁴ AMTA Petition for Rulemaking, RM-9332 (filed June 19, 1998). The petition was placed on public notice on July 31, 1998. Public Notice, Report No. 2288 (rel. July 31, 1998).

²⁰⁵ See *Part 1 Third Report and Order*, 13 FCC Rcd. 374, 382 ¶ 5, 386 ¶ 12.

IV. AUCTION DESIGN

A. Competitive Bidding Methodology and Design

75. As we explained in paragraph 20, *supra*, even though a reference to the public interest objectives outlined in Section 309(j)(3) is no longer included in Section 309(j)(2), the objectives of our competitive bidding system remain unchanged. In designing competitive bidding methodologies, Section 309(j)(3) requires that we promote development and rapid deployment of new technologies and services; promote economic opportunity and competition, and ensure that new and innovative technologies are readily accessible to Americans; recover for the public a portion of the value of the spectrum; and promote efficient and intensive use of the electromagnetic spectrum.²⁰⁶ For those services that we determine are potentially auctionable as a result of the Balanced Budget Act redefining our auction authority, we seek comment below on how to implement competitive bidding in a manner that will further those objectives.

76. We have previously observed that the use of competitive bidding to assign geographic overlay licenses in private radio services would promote spectrum efficiency.²⁰⁷ This approach would promote competition among licensees, which, in turn, would provide market-based incentives for efficient spectrum use. In particular, incumbents would be able to continue existing operations without harmful interference, and overlay licensees would be able to negotiate voluntary mergers, buyouts, frequency swaps, or similar arrangements with incumbents.²⁰⁸ Thus, the overlay licensee would incur an opportunity cost if spectrum is not used as efficiently as possible and would have incentives to promote spectrum efficiency. Another method for introducing market-based incentives and encouraging greater spectrum efficiency in the private radio service bands is to implement market-based user fees as an alternative to, or in conjunction with, competitive bidding. We have previously sought comment on the implementation of user fees and we continue to believe that market-based user fees are a desirable means for encouraging greater spectrum efficiency.²⁰⁹ However, the Commission does not currently have statutory authority to impose spectrum user fees.

77. We are cognizant of private wireless operators' concerns about their ability to compete for spectrum in the open market with commercial wireless service providers operating their systems as a direct source of revenue.²¹⁰ We realize that some private wireless licensees may be concerned that auctioning licenses for private internal radio services will lead to a concentration of licenses in the hands of a few operators in each market to the detriment of small businesses. With these concerns in mind, we seek to develop a competitive bidding process that is tailored to the specific characteristics of the private radio services, the various purposes for which spectrum in those services is used, and the needs of the various types of entities holding licenses in those services.

²⁰⁶ See 47 U.S.C. § 309(j)(3)(A)-(D).

²⁰⁷ See *Refarming Report and Order*, 10 FCC Rcd at 10138-39 ¶¶ 141-143.

²⁰⁸ See *id.* at 10139 ¶¶ 142-143.

²⁰⁹ See *id.* at 10136-38 ¶¶ 136-140.

²¹⁰ See *800 MHz MO & O*, 12 FCC Rcd at 10004 ¶ 102.

78. In many of its previous auctions, the Commission has used the simultaneous multiple-round competitive bidding design.²¹¹ Simultaneous multiple-round bidding has the advantage of affording bidders more information during the auction concerning the value that competing bidders place on what is being auctioned than is the case with single-round or sequential bidding. For this reason, simultaneous multiple-round bidding is more likely to result in the party that values the spectrum the most acquiring the license. In Section 1.2103(a) of our rules, we set out the various types of auction designs from which we may choose to award licenses for services or classes of services subject to competitive bidding.²¹² However, under Section 309(j) we also have authority to design and test other auction methodologies.²¹³ For example, in Section 3002(a) of the Balanced Budget Act, Congress directed that we design and test competitive bidding using a contingent combinatorial bidding system.²¹⁴ Combinatorial bidding, also known as package bidding, allows bidders to place single bids for groups of licenses.²¹⁵

79. We seek comment on whether alternate competitive bidding designs and methodologies should be considered for any private radio services that may be determined to be auctionable as a result of the Balanced Budget Act. Would the same auction methodology be appropriate for all newly auctionable services or are different methodologies warranted? Should the type of auction vary depending on the type of private service involved, the number of licenses at stake, the number of bidders that are likely to participate, and the degree to which interdependence may be important to those likely to bid on a license in a particular service or band?

80. We also recognize that private internal radio service licensees using spectrum to conduct their day-to-day business operations may not be able to wait a significant amount of time to obtain authorizations for the frequencies they need to conduct their businesses. We therefore seek comment on the frequency with which we should conduct auctions of private radio services spectrum that we determine is auctionable, and whether we should conduct such auctions at regularly scheduled intervals.

²¹¹ In a simultaneous multiple-round auction, bidding is open on all licenses or permits at once, and may remain open on all licenses until no more bids are received on any license. By contrast, in a sequential auction, licenses or permits are auctioned one at a time, and bidding ends on one license before bids are accepted for another license.

²¹² 47 C.F.R. § 1.2103(a). Alternative designs include: (1) sequential multiple-round auctions, using either oral ascending, remote and/or on-site electronic bidding; and (2) sequential or simultaneous single round auctions, using either remote and/or on-site electronic bidding, or sealed bids. *See generally* 47 C.F.R. § 1.2103.

²¹³ Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, WT Docket No. 97-82, *Order, Memorandum Opinion and Order and Notice of Proposed Rule Making*, 12 FCC Rcd 5686, 5691 ¶ 6 (1997) ("*Part 1 Order*").

²¹⁴ Section 3002(a) of the Balanced Budget Act added the following language to Section 309(j)(3): "The Commission shall, directly or by contract, provide for the design and conduct (for the purpose of testing) of competitive bidding using a contingent combinatorial bidding system that permits prospective bidders to bid on combinations or groups of licenses in a single bid and to enter multiple alternative bids within a single bidding round."

²¹⁵ The Commission has awarded a research and development contract to a private sector consultant to examine theoretical and applied combinatorial bidding approaches where licenses exhibit strong synergies and bidders have overlapping preferences (*i.e.*, prefer different packages of licenses). *See Part 1 Third Report and Order*, 13 FCC Rcd at 453 ¶ 137. *See also* "Wireless Bureau Begins Process of Designing a Combinatorial Bidding System for Future Commission Auctions," *News Report No.* WT 98-35 (rel. Sept. 28, 1998).

B. Eligibility Requirements

81. Because private radio services are dedicated to use by a defined group of eligible users, our service regulations set forth specific limitations on who is eligible to use each service.²¹⁶ For private services that may be subject to competitive bidding for the first time, we seek comment below on whether such eligibility restrictions should limit who is eligible to participate in the auctions of spectrum in those services. We also seek comment on other means by which we can tailor a competitive bidding system to ensure that private wireless users have a reasonable opportunity to obtain sufficient spectrum to meet the needs of their day-to-day business operations.

82. With respect to private radio services that may be licensed using competitive bidding, we seek comment on whether we should conduct limited-eligibility auctions by establishing eligibility criteria that restrict the types of entities that may bid on such auctionable spectrum. If we decide to conduct limited-eligibility auctions, how should we define the class of eligible bidders? For services that may be auctionable for the first time, should we define eligibility to bid in the same manner as we have previously defined eligibility to hold an authorization in that service? For each auctionable service, should we establish multiple classes of eligible applicants and assign priority status to certain classes, so that applicants with higher priority classifications would be allowed to bid on licenses before applicants with lower priority classifications?

83. Should the class or classes of entities eligible to bid in a spectrum auction for private radio services be based only on the purpose for which the spectrum will be used, or should we also establish eligibility criteria based on the size of the applicant? What other standards could we use to establish eligibility to bid on auctionable private radio services spectrum? If we establish size standards for eligibility, should we adopt the Small Business Administration's (SBA) size standards under the Standard Industrial Classifications ("SIC")²¹⁷ or should we establish size standards on a service-specific basis, taking into account the characteristics and capital requirements of particular private services?²¹⁸

84. If we decide to establish size standards on a service-specific basis, should we measure an applicant's size by gross revenues, total assets, or some other standard? In the *Part 1 Third Report and Order*, we decided that our service-specific small business definitions will be expressed in terms of average gross revenues over the preceding three years "not to exceed" particular amounts, because we believe that average gross revenues provide an accurate, equitable, and easily ascertainable measure of business size.²¹⁹ Should we similarly adopt average gross revenues as a measure of business size for the purpose of determining eligibility for auctionable private radio services spectrum? If we decide to use average gross revenues as our measure of applicant size, should we use the uniform definition of gross

²¹⁶ See, e.g., 47 C.F.R. §§ 90.20 (Public Safety Radio Pool); 90.35 (Industrial/Business Radio Pool); 90.103 (Radiolocation Service); 101.601 (Private Operational Fixed Point-to-Point Microwave Service).

²¹⁷ See 13 C.F.R. § 121.201. Entities engaged in radiotelephone communications (SIC Code 4812) employing no more than 1,500 persons qualify as small business concerns. *Id.* Entities engaged in telegraph and other message communications (SIC Code 4822) with no more than \$5 million in annual receipts also qualify as small business concerns. *Id.*

²¹⁸ See, e.g., 47 C.F.R. § 1.2110(b)(1).

²¹⁹ See *Part 1 Third Report and Order*, 13 FCC Rcd at 388-89 ¶ 19.

revenues that we adopted for all auctionable services in our Part 1 rules?²²⁰ If applicant eligibility is to be based on gross revenues or total assets, what dollar amounts should be set as the eligibility thresholds?

85. We seek comment on whether entities eligible for licenses in the public safety radio services should also be eligible to bid competitively with other applicants for frequencies allocated for private internal or commercial use. Applicants seeking spectrum for public safety radio services without bidding competitively are able to apply for spectrum that we have specifically allocated for that purpose or file a waiver request for unassigned spectrum pursuant to Section 337(c).²²¹ However, we could allow those same entities to participate in auctions of other spectrum that we have designated for private or commercial radio services. We seek comment on this proposal.

86. We also request comment on whether providers of commercial wireless telecommunications services should be included in one or more of the classes of entities eligible to bid on auctionable private radio service spectrum. We seek comment on the criteria that should be used to distinguish between applicants seeking spectrum for use in conducting their underlying businesses and those seeking to use spectrum as providers of commercial wireless telecommunications services. Should commercial telecommunications service providers be allowed to bid on spectrum allocated for private radio services, only if they commit to using the spectrum to meet the private communications needs of other entities eligible to hold licenses in the private radio services?

87. Another approach to auctioning spectrum for private radio services would be to permit any qualified entity to bid on such spectrum, but to establish rules that either set aside specific licenses or confer certain financial benefits, such as bidding credits, on applicants that meet certain criteria. We seek comment on what eligibility criteria we should employ if we decide to establish a special class of licensee for the private internal radio services. As an alternative to business size standards, should we establish spectrum caps that, if exceeded, would preclude eligibility for such spectrum set-asides or favorable financial treatment?

C. Band Manager Licenses

88. Today, applicants for PLMRS licenses must obtain a frequency recommendation from a certified coordinator in order to prosecute a license application before the Commission. The certified coordinators base their frequency recommendations on detailed operational and technical requirements set forth in Part 90 of our Rules. In considering how private radio services should be licensed to meet current and projected needs for internal communications capacity, we seek comment on whether the public interest would be served by establishing a new class of licensee called a “Band Manager.”

89. As considered here, a Band Manager would be eligible to apply for a private radio license, with mutually exclusive applications subject to resolution through competitive bidding. The Commission’s principal role would be to allocate spectrum for private services, establish the size and scope of the Band Manager license, and conduct auctions if mutually exclusive applications are received. As a condition of the Band Manager license, the Band Manager would be required to restrict its operations to the offering of internal communications services and/or capacity to an identified class of private radio eligibles. A Band Manager would be authorized to sublicense portions of its license to specific eligible users for a length of time not to exceed the expiration of the initial license term. Under this approach, the

²²⁰ See 47 C.F.R. § 1.2110(m).

²²¹ See 47 U.S.C. § 337(c).

Band Manager would remain a Commission licensee, and would be held solely responsible for its sublicensee's compliance with our rules. We note that the Band Manager may be akin to a commercial licensee that offers capacity on its system, via resale, for example, to an end user that is not directly licensed by the Commission. Band Manager sublicense arrangements would be accomplished through private contractual arrangements between the Band Manager and eligible users, in a manner similar to agreements reached between commercial licensees and resellers.

90. At the outset, we seek comment on how the concept of a Band Manager fits within the Commission's overall spectrum management responsibilities. For example, would the creation of a Band Manager be consistent with the Commission's spectrum management obligations under various sections of the Communications Act?²²² We also seek comment on whether this concept is consistent with our obligation to determine whether the public interest, convenience and necessity will be served by the grant of each application filed with the Commission for use of the radio spectrum.²²³ In this regard, we seek comment on whether Band Managers, as described above, would effectively be allocating spectrum or assuming the Commission's spectrum management responsibilities, or simply acting as licensees with various types of end user customers.

91. We note that private radio systems serve a wide variety of specialized communications needs that historically have not been fulfilled by commercial service providers. Because market forces have not, to date, played a role in the availability and licensing of private spectrum, the Commission lacks a reliable method for objectively gauging current and future demand for private spectrum. Making a Band Manager license available at auction for the sole purpose of making spectrum available for private radio service users may enable the Commission to use market forces to determine private spectrum requirements.

92. Creation of the Band Manager license could further privatize our licensing of private radio spectrum. Competition among Band Managers would serve to regulate price, quality, and availability of services. Private radio users could generally benefit through assured availability of the types of quality, customized services that may not be readily available from cellular, paging, PCS or SMR service providers. Competition among Band Managers would ensure that the available spectrum is used in the most economically efficient manner to meet the varied and assorted needs of the private user community. We seek comment on the costs and benefits of Band Manager licenses relative to alternative methods of providing internal communications services. To what extent can licensees such as PCS providers currently meet the requirements of private users with commercial services? Can such licensees already exercise some, or all, of the functions of a Band Manager licensee by sublicensing spectrum to private users? If so, to what extent are they doing so? Are they likely to expand such sublicensing arrangements in the future as the demand for private uses increases? Would restrictions on eligible users and uses attached to Band Manager licenses be an appropriate response to a market failure that discourages current licensees from acting as Band Managers? To what extent can partitioning and disaggregation of current licenses meet the demand for internal communications capacity? Compared to the current system of frequency coordination and direct licensing of private users, would Band Managers ensure that spectrum is used more efficiently? Would allowing Band Managers to charge private users for spectrum use tend to discourage spectrally wasteful and low value uses? Would Band Managers have a greater incentive than frequency coordinators to consider future spectrum requirements when making spectrum available for current uses because their profit is more closely tied to maximizing the value of the spectrum over the entire expected license term?

²²² See, e.g., 47 U.S.C. §§ 1, 301, 303(c), (d).

²²³ See 47 U.S.C. § 309(a).

93. In addition to comment on the general concept of the Band Manager license, we ask for comment on the full range of implementation issues. If adopted, where might Band Manager licenses best be applied? Should they be limited to any newly available spectrum for private radio services or should they be created as overlay licenses on certain bands already allocated for private radio services? Should we establish any additional eligibility or use restrictions in connection with the Band Manager license, and if so, what are the public interest benefits that would result from such additional restrictions? In this respect, we seek comment on how we can ensure fair and nondiscriminatory access by private radio users to spectrum licensed to a Band Manager in the user's geographic area. Additionally, should we adopt rules that limit spectrum licensed to Band Managers and/or sublicensed to eligible users to private uses? We ask for comment on whether the Band Manager should be authorized to partition and disaggregate its license, and if so, should there be any limitations on this authority, or should we require the Band Manager to retain some portion of its license? We also seek comment on whether we should impose buildout or use requirements on Band Managers to ensure that spectrum assigned to Band Managers is used efficiently. We seek comment on other requirements that the Commission could adopt to ensure that spectrum licensed to Band Managers would be used to meet the varied needs of the private user community. Finally, we seek comment on the enforcement measures, including license cancellation, to which a Band Manager licensee should be subject if it administers its spectrum in a manner that is inconsistent with the requirements of our service rules.

94. We also seek comment on whether an applicant for a Band Manager license should receive priority over other competing bidders through use of some level of bidding credit. Commenters should also address whether we should conduct auctions that are limited to the grant of Band Manager licenses, or whether we should hold auctions for particular blocks of spectrum, with the Band Manager licenses being one of many potential uses.

95. As noted above, it would be essential that each geographic area have several competing Band Managers so that market forces would substitute for regulation of rates and services. We therefore seek comment on whether the Commission should grant more than one Band Manager license in a geographic area to allow for competition among Band Managers. We also ask for comment on what types of limitations on ownership and control of Band Manager licenses should be imposed to preserve competition and market-based incentives. Commenters should address both the amount of spectrum contained in each Band Manager license, as well as the geographic area that each such license might encompass. In addition, commenters should provide recommendations for attribution of ownership and control of Band Manager licenses.

D. Processing of New Applications

96. In services where the Commission has transitioned to geographic area licensing and auction rules, it has suspended acceptance of new license applications until such time as it adopts final rules and begins accepting applications to participate in the auction for spectrum in those services.²²⁴ The

²²⁴ See, e.g., Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 12 FCC Rcd 16949, 17015 ¶ 132; Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, *Notice of Proposed Rule Making*, 11 FCC Rcd 3108, 3136 ¶ 139 & n.270 (1996) ("*Paging Notice*"); Licensing of General Category Frequencies in the 806-809.750/851-854.750 MHz Bands, *Order*, 10 FCC Rcd 13190 ¶ 3 (1995).

Commission has stated that the purpose of such an application freeze is to deter speculative applications and ensure that the goals of the rule making are not compromised.²²⁵

97. For services in which licenses will be assigned by auction for the first time, we seek comment on the measures we should take to prevent applicants from using the current application and licensing processes to engage in speculative activity prior to our adoption of auction rules, thus limiting the effectiveness of the decisions made in this proceeding. One approach would be to temporarily suspend acceptance of applications for new licenses, amendments, or major modifications in frequency bands for which we propose to adopt competitive bidding in the future. Alternatively, we could adopt interim rules imposing shorter time periods for construction or build-out. For example, we could impose a construction deadline as short as five months from licensing, which might be an effective means of ensuring that applicants seek only those licenses for which they have an immediate need. We seek comment on this proposal and on whether there are any other measures that would deter speculative applications in services where we propose to assign licenses by auction.

V. PROCEDURAL MATTERS

A. Ex Parte Rules -- Permit-But-Disclose Proceeding

98. This is a permit-but-disclose notice and comment rule making proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in Commission rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206.

B. Initial Regulatory Flexibility Analysis

99. As required by the Regulatory Flexibility Act, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis ("IRFA") of the possible impact on small entities of the proposals suggested in the *Notice of Proposed Rule Making*. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the *Notice of Proposed Rule Making*, and they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Commission's Office of Public Affairs, Reference Operations Division, will send a copy of this *Notice of Proposed Rule Making*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act, *see* 5 U.S.C. § 603(a).

C. Initial Paperwork Reduction Act of 1995 Analysis

100. This *Notice of Proposed Rule Making* contains neither a new nor a modified information collection.

D. Comment Dates

101. Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before July 2, 1999, and reply comments on or before August

²²⁵ *See* Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, *First Report and Order*, 11 FCC Rcd 16570, 16572 ¶3 (1996) ("*Paging First Report and Order*").

2, 1999. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

102. Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

103. Parties who choose to file by paper must file an original and four copies of each filing. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, The Portals, 445 Twelfth Street, S.W., Room TW-A325, Washington, D.C. 20554. In addition, a courtesy copy should be delivered to Gary D. Michaels, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, The Portals, 445 Twelfth Street, S.W., Washington, DC 20554.

104. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239), 1919 M Street, N.W., Washington, D.C. 20554. It is anticipated that the Reference Center will be relocated to the Commission's Portals Building, Room CY-A257, during the late spring or early summer of 1999. Accordingly, interested parties are advised to contact the FCC Reference Center at (202) 418-0270 to determine its location.

E. Further Information

105. For further information concerning this *Notice of Proposed Rule Making*, contact Gary D. Michaels, Auctions and Industry Analysis Division, (202) 418-0660, or Scot Stone, Public Safety and Private Wireless Division, (202) 418-0680, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, DC 20554.

F. Ordering Clauses

106. Accordingly, IT IS ORDERED THAT, pursuant to Sections 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 303(r), and 309(j), this *Notice of Proposed Rule Making* is hereby ADOPTED.

107. IT IS FURTHER ORDERED that the Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this *Notice of Proposed Rule Making*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX A
Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act (RFA),²²⁶ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this *Notice of Proposed Rule Making (Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Notice* provided above in paragraph 101. The Commission will send a copy of the *Notice of Proposed Rule Making*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.²²⁷ In addition, the *Notice of Proposed Rule Making* and IRFA (or summaries thereof) will be published in the Federal Register.²²⁸

A. Need for and Objectives of the Proposed Rules:

2. This rule making proceeding is initiated to evaluate the impact of the Balanced Budget Act of 1997 on the Commission's auction authority for wireless telecommunications services. The Balanced Budget Act revised the original auction standard established under the Omnibus Budget Reconciliation Act of 1993. The *Notice* seeks comment on how the Balanced Budget Act's amendments to Section 309(j) affect the Commission's determinations of what services are auctionable. The *Notice* also seeks comment on the scope of the Balanced Budget Act's exemption from competitive bidding for licenses and permits issued for public safety radio services. The *Notice* also seeks comment on a Petition for Rule Making that proposes the establishment of a new radio service pool for use by electric, gas, and water utilities, petroleum and natural gas pipeline companies, and railroads, and on implementation of Section 337(c), which provides for the licensing of unassigned frequencies under certain circumstances to entities seeking to provide public safety services. In addition, the *Notice* seeks comment on whether the Balanced Budget Act's amendments to Section 309(j) require the Commission to revise its licensing schemes and license assignment methods to provide for competitive bidding in services that it previously determined were not auctionable, and on how such schemes for new services might be established. Additionally, the *Notice* seeks comment on how the Commission might implement competitive bidding to award licenses in services that will be auctionable for the first time.

B. Legal Basis:

3. This action is authorized under Sections 4(i), 303(r), and 309 (j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 309(j).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:

²²⁶ See 5 U.S.C. § 603. The RFA has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

²²⁷ See 5 U.S.C. § 603(a).

²²⁸ See *id.*

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules, if adopted.²²⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."²³⁰ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate for its activities.²³¹ Under the Small Business Act, a "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).²³² A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."²³³ Nationwide, as of 1992, there were approximately 275,801 small organizations.²³⁴ "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."²³⁵ As of 1992, there were approximately 85,006 such jurisdictions in the United States.²³⁶ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.²³⁷ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities. The policies and rules proposed in the *Notice* would affect a number of small entities who are either licensees or who may choose to become applicants for licenses in wireless services.²³⁸ Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by the proposed policies and rules, if adopted.

a. Cellular Radiotelephone Service

²²⁹ 5 U.S.C. § 603(b)(3).

²³⁰ 5 U.S.C. § 601(6).

²³¹ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.

²³² 15 U.S.C. § 632.

²³³ 5 U.S.C. § 601(4).

²³⁴ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

²³⁵ 5 U.S.C. § 601(5).

²³⁶ U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

²³⁷ *Id.*

²³⁸ *See* n.3.

5. The Commission has not developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons.²³⁹ The size data provided by the SBA does not enable us to make a meaningful estimate of the number of cellular providers which are small entities because it combines all radiotelephone companies with 1000 or more employees.²⁴⁰ The 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, is the most recent information available. This document shows that only twelve radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees.²⁴¹ Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA's definition. The Commission assumes, for purposes of this IRFA that nearly all of the current cellular licensees are small entities, as that term is defined by the SBA.²⁴²

6. The most reliable source of information regarding the number of cellular service providers nationwide appears to be data the Commission publishes annually in its Telecommunications Industry Revenue report, regarding the Telecommunications Relay Service (TRS). The report places cellular licensees and Personal Communications Service (PCS) licensees in one group. According to the data released in November, 1997, there are 804 companies reporting that they engage in cellular or PCS service.²⁴³ It seems certain that some of these carriers are not independently owned and operated, or have more than 1,500 employees; however, the Commission is unable at this time to estimate with greater precision the number of cellular service carriers qualifying as small business concerns under the SBA's definition. For purposes of this IRFA, the Commission estimates that there are fewer than 804 small cellular service carriers.

b. Broadband and Narrowband PCS

7. Broadband PCS. The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has auctioned licenses in each block. Frequency blocks C and F have been designated by the Commission as "entrepreneurs' blocks," and participation in auctions of C and F block licenses is limited to entities qualifying under the Commission's rules as entrepreneurs. The Commission's rules define an entrepreneur for purposes of C and F block auctions as an entity, together with affiliates, having gross revenues of less than \$125 million and total assets of less than \$500 million at the time the FCC Form 175 application is filed. For blocks C and F, the Commission has defined "small business" as a firm that had average gross revenues of less than \$40 million in the three previous calendar

²³⁹ 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.

²⁴⁰ U.S. Small Business Administration 1992 Economic Census Employment Report, Bureau of the Census, U.S. Department of Commerce, (radiotelephone communications industry data adopted by the SBA Office of Advocacy) (SIC Code 4812).

²⁴¹ U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 5, Employment Size of Firms: 1992, SIC Code 4812 (issued May 1995).

²⁴² In addition, the Commission notes that there are 1,758 cellular licenses; however, a cellular licensee may own several licenses.

²⁴³ FCC, Telecommunications Industry Revenue: TRS Fund Worksheet Data, Figure 2 (Number of Carriers Paying Into the TRS Fund by Type of Carrier) (Nov. 1997).

years,²⁴⁴ and "very small business" has been defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²⁴⁵ These definitions of "small business" and "very small business" in the context of broadband PCS auctions have been approved by the SBA. No small businesses within the SBA-approved definitions bid successfully for licenses in blocks A and B. In the first two C block auctions, there were 90 bidders that qualified as small entities and won licenses in block C. In the first auction of D, E, and F block licenses, a total of 93 small and very small business bidders won approximately 40% of the 1,479 licenses for blocks D, E, and F.²⁴⁶ Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C block bidders and the 93 winning bidders in the D, E, and F blocks, for a total of 183 small entity PCS providers as defined by the Commission's auction rules.

8. Narrowband PCS. The Commission has auctioned nationwide and regional licenses for narrowband PCS. There are 11 nationwide and 30 regional licensees for narrowband PCS. The Commission does not have sufficient information to determine whether any of these licensees are small businesses within the SBA-approved definition for radiotelephone companies. At present, there have been no auctions held for the major trading area (MTA) and basic trading area (BTA) narrowband PCS licenses. The Commission anticipates a total of 561 MTA licenses and 2,958 BTA licenses will be awarded in the auctions. Given that nearly all radiotelephone companies have no more than 1,500 employees, and that no reliable estimate of the number of prospective MTA and BTA narrowband licensees can be made, the Commission assumes, for purposes of this IRFA, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

c. 220 MHz Radio Services

9. The Commission recently auctioned licenses in the 220-222 MHz band. The license blocks include five licenses in each of the 172 Economic Areas (EAs) and three EA-like areas; five licenses in six Economic Area groupings (EAGs); and three Nationwide licenses, comprising the same territory as all of the EAGs combined. For this auction, a small business was defined as an entity with average annual gross revenues of not more than \$15 million for the preceding three years;²⁴⁷ and very small business was defined as a firm with average annual gross revenues of not more than \$3 million for the preceding three years.²⁴⁸ A total of 373 licenses were won by 39 small business bidders and 320 licenses were won by five other bidders. Given that nearly all radiotelephone companies employ no more than 1,500 employees, for purposes of this IRFA, the Commission will consider the approximately 3,800 incumbent licensees as small businesses under the SBA definition.

d. Paging

²⁴⁴ See 47 C.F.R. § 24.720(b)(1).

²⁴⁵ See 47 C.F.R. § 24.720(b)(2).

²⁴⁶ FCC News, Broadband PCS, D, E, and F Block Auction Closes, No. 71744 (rel. Jan 14, 1997).

²⁴⁷ See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Third Report and Order and Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 10943, 11068-69 ¶ 291 (1997).

²⁴⁸ 47 C.F.R. § 90.1021.

10. The Commission has adopted a two-tier definition of small businesses in the context of auctioning geographic area paging licenses in the Common Carrier Paging and exclusive Private Carrier Paging services. This definition has been approved by the SBA. Under the definition, a very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than \$3 million. A small business is defined as an entity that, together with affiliates and controlling principals, has average gross revenues for the three preceding calendar years of not more than \$15 million.²⁴⁹ At present, there are approximately 24,000 Private Paging licenses and 74,000 Common Carrier Paging licenses. According to Telecommunications Industry Revenue data, there were 172 "paging and other mobile" carriers reporting that they engage in these services.²⁵⁰ Consequently, the Commission estimates that there are fewer than 172 small paging carriers. The Commission estimates that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

e. Air-Ground Radiotelephone Service

11. The Commission has not adopted a definition of small business specific to the Air-Ground radiotelephone service.²⁵¹ Accordingly, the Commission will use the SBA definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. There are approximately 100 licensees in the Air-Ground radiotelephone service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

f. Specialized Mobile Radio (SMR)

12. The Commission has adopted a two-tier definition of small businesses in auctions for geographic area 800 MHz and 900 MHz SMR licenses. A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than \$3 million. A small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than \$15 million. The definitions of "small business" and "very small business" in the context of 800 MHz and 900 MHz SMR have been approved by the SBA. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. The Commission assumes for purposes of this IRFA that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 900 MHz SMR band and 800 MHz SMR band. There were 60 winning bidders who qualified as small businesses in the 900 MHz auction. In the 800 MHz SMR auction there were 524 licenses won by winning bidders, of which 38 licenses were won by small or very small businesses.

²⁴⁹ See Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732, 2811-12 ¶¶ 178-81 (1997). See also Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy J. Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau (December 2, 1998).

²⁵⁰ FCC, Telecommunications Industry Revenue: TRS Fund Worksheet Data, Figure 2 (Number of Carriers Paying Into the TRS Fund by Type of Carrier) (Nov. 1997).

²⁵¹ Air-Ground radiotelephone service is defined in section 22.99 of the Commission's rules, 47 C.F.R. § 22.99.

g. Private Land Mobile Radio Services (PLMR)

13. PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. The Commission has not developed a definition of small entities specifically applicable to PLMR licensees due to the vast array of PLMR users. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons.²⁵² For the purpose of determining whether a licensee is a small business as defined by the SBA, each licensee would need to be evaluated within its own business area. The Commission is unable at this time to estimate the number of small businesses which could be impacted by the rules. The Commission's 1994 Annual Report on PLMRs indicates that at the end of fiscal year 1994 there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz.²⁵³ Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the proposed rules could potentially impact every small business in the United States.

h. Aviation and Marine Radio Service

14. Small entities in the aviation and marine radio services use a marine very high frequency (VHF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, a VHF aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. Therefore, the applicable definition of small entity is the definition under the SBA rules. Most applicants for individual recreational licenses are individuals.²⁵⁴ Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. Therefore, for purposes of the evaluations and conclusions in this IRFA, the Commission estimates that there may be at least 712,000 potential licensees that are individuals or are small entities, as that term is defined by the SBA.

i. Offshore Radiotelephone Service

15. This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico.²⁵⁵ At present, there are approximately 55 licensees in this service. The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition for radiotelephone communications. The Commission assumes, for purposes of this IRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

j. General Wireless Communication Service (GWCS)

²⁵² 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.

²⁵³ Federal Communications Commission, 60th Annual Report, fiscal Year 1994, at 116.

²⁵⁴ The Commission no longer requires individual licenses.

²⁵⁵ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

16. This service was created by the Commission on July 31, 1995²⁵⁶ by transferring 25 MHz of spectrum in the 4660-4685 MHz band from the federal government to private sector use. The Commission sought and obtained SBA approval of a refined definition of "small business" for GWCS.²⁵⁷ According to this definition, a small business is any entity, together with its affiliates and entities holding controlling interests in the entity, that has average annual gross revenues over the three preceding years that are not more than \$40 million.²⁵⁸ The Commission will offer 875 geographic area licenses, based on Economic Areas, for GWCS. In estimating the number of small entities that may participate in the GWCS auction, the Commission anticipates that the makeup of current wireless services licensees is representative of future auction winning bidders.

k. Fixed Microwave Services

17. Microwave services includes common carrier fixed,²⁵⁹ private operational fixed,²⁶⁰ and broadcast auxiliary radio services.²⁶¹ At present, there are 22,015 common carrier fixed licensees and approximately 61,670 private operational fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this IRFA, the Commission will utilize the SBA definition applicable to radiotelephone companies, i.e., an entity with less than 1,500 persons. The Commission estimates that for purposes of this IRFA all of the Fixed Microwave licensees (excluding Multiple Address Systems broadcast auxiliary radio licensees) would qualify as small entities under the SBA definition for radiotelephone communications.

l. Amateur Radio Service

18. The Commission estimates that 10,000 applicants applied for vanity call signs in

²⁵⁶ See Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, ET Docket No. 94-32, *Second Report and Order*, 11 FCC Rcd 624 (1995).

²⁵⁷ See Letter to Daniel B. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, U.S. Small Business Administration, dated May 19, 1998.

²⁵⁸ See 47 C.F.R. § 26.4.

²⁵⁹ 47 C.F.R. § 101 *et seq.* (formerly Part 21 of the Commission's rules).

²⁶⁰ Persons eligible under Parts 80 and 90 of the Commission's rules can use private Operational Fixed Microwave services. See, 47 C.F.R. § 80.1 *et seq.*; 47 C.F.R. § 90.1 *et seq.* Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use an operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

²⁶¹ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's rules. See 47 C.F.R. § 74.1 *et seq.* Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points, such as a main studio and an auxiliary studio. The broadcast auxiliary microwave services also include mobile TV pickups which relay signals from a remote location back to the studio.

FY 1998. All are presumed to be individuals. Amateur Radio service licensees are coordinated by Volunteer Examiner Coordinators (VECs).²⁶² The Commission has not developed a definition for a small business or small organization that is applicable for VECs. The RFA defines the term "small organization" as meaning "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field . . .".²⁶³ The Commission's rules do not specify the nature of the entity that may act as a VEC. All of the sixteen VEC organizations would appear to meet the RFA definition for small organizations.

m. Personal Radio Services

19. Personal radio services provide short-range, low power radio for personal communications, radio signaling, and business communications not provided for in other services. These services include citizen band (CB) radio service, general mobile radio service (GMRS), radio control radio service, and family radio service (FRS).²⁶⁴ Inasmuch as the CB, GMRS, and FRS licensees are individuals, no small business definition applies for these services. To the extent any of these licensees may be small entities under the SBA definition, the Commission is unable at this time to estimate the exact number.

n. Rural Radiotelephone Service

20. The Commission has not adopted a definition of small entity specific to the Rural Radiotelephone Service.²⁶⁵ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio Systems (BETRS).²⁶⁶ The Commission will use the SBA definition applicable to radiotelephone companies; i.e., an entity employing no more than 1,500 persons. There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

o. Marine Coast Service

²⁶² ARRL/VEC and the W5YI-VEC are components of organizations that publish materials marketed to persons for the purpose of preparing for passing the examinations required for the grant of an amateur operator license. This publishing activity is separate from their VEC activity. A VEC is an organization that has entered into a written agreement with the FCC to coordinate the examinations for amateur operator licenses. The examinations are prepared and administered by tens of thousands of amateur operators who serve as Volunteer Examiners. The VEC organization must exist for the purpose of furthering the amateur service, be capable of service as a VEC in at least one of the thirteen VEC regions, agree to coordinate the examinations, agree to assure that every examinee is registered without regard to race, sex, religion, national origin or membership in any amateur service organization, and cooperate in maintaining the question pools for VECs. See 47 C.F.R. §§ 97.521, 97.523.

²⁶³ 5 U.S.C. § 601(4).

²⁶⁴ The Citizens Band (CB) Radio Service, General Mobile Radio Service (GMRS), Radio Control (R/C) Radio Service, and Family Radio Service (FRS) are governed by subpart D, subpart A, subpart C, and subpart B, respectively, of Part 95 of the Commission's rules. 47 C.F.R. §§ 95.401 through 95.428; 47 C.F.R. §§ 95.1 through 95.181; 47 C.F.R. §§ 95.201 through 95.225; 47 C.F.R. §§ 95.191 through 95.194.

²⁶⁵ Rural Radiotelephone Service is defined in section 22.99 of the Commission's rules, 47 C.F.R. § 22.99.

²⁶⁶ BETRS is defined in sections 22.757 and 22.729 of the Commission's rules, 47 C.F.R. §§ 22.757, 22.729.

21. The Commission recently concluded its auction of Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of this auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. A "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.²⁶⁷ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as small under the SBA definition.

p. Wireless Communications Services (WCS)

22. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the WCS auction as an entity with average gross revenues of \$40 million for each of the three preceding years.²⁶⁸ The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders who qualified as very small business entities, and one that qualified as a small business entity. Based on this information, the Commission concludes that the number of geographic area WCS licensees affected includes these eight entities.

q. Public Safety Radio Services and Governmental Entities

23. Public Safety radio services include police, fire, local governments, forestry conservation, highway maintenance, and emergency medical services.²⁶⁹ There are a total of approximately 127,540 licensees within these services. Governmental entities as well as private businesses comprise the licensees for these services. As noted above, governmental entities with populations of less than 50,000 fall within

²⁶⁷ Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853, 19884-85 ¶ 65 (1998).

²⁶⁸ See Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS"), GN Docket 96-228, *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

²⁶⁹ With the exception of the special emergency service, these services are governed by subpart B of part 90 of the Commission's rules. 47 C.F.R. §§90.15 through 90.27. The police service includes 26,608 licensees that serve state, county and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes 22,677 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service that is presently comprised of 40,512 licensees that are state, county or municipal entities that use the radio for official purposes not covered by other public safety services. There are 7,325 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The 9,480 state and local governments are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The 1,460 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical communications related to the actual delivery of emergency medical treatment. 47 C.F.R. §§ 90.15 through 90.27. The 19,478 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities and emergency repair of public communication facilities. 47 C.F.R. §§ 90.33 through 90.55.

the SBA definition of a small entity.²⁷⁰ There are 85,006 governmental entities in the nation, as of the last census.²⁷¹ This number includes such entities as states, counties, cities, utility districts, and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000; however, this number includes 38,978 counties, cities, and towns and of those, 37,566 or 96 percent, have populations of fewer than 50,000.²⁷² The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, the Commission estimates that 96 percent or 81,600 are small entities that may be affected by our rules.

D. Description of Projected Reporting, Recordkeeping, and other Compliance Requirements:

24. At this time, the Commission does not anticipate the imposition of new reporting, recordkeeping, or other compliance requirements as a result of this *Notice*. We seek comment on this tentative conclusion.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:

25. Section 309(j) of the Communications Act directs the Commission to disseminate licenses among a wide variety of applicants, including small businesses and other designated entities.²⁷³ Section 309(j) also requires that the Commission ensure the development and rapid deployment of new technologies, products, and services for the benefit of the public, and recover for the public a portion of the value of the public spectrum resource made available for commercial use.²⁷⁴ In addition, Section 337 gives eligible providers of public safety services a means to obtain unassigned spectrum not otherwise allocated for public safety purposes.²⁷⁵ The Commission believes the policies and rules proposed in this *Notice* help meet those goals and promote efficient competition while maintaining the fair and efficient execution of the auctions program. We seek comment, therefore, on all proposals and alternatives described in the *Notice*, and the impact that such proposals and alternatives might have on small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules:

26. None.

²⁷⁰ 5 U.S.C. § 601(5).

²⁷¹ 1992 Census of Governments, Bureau of the Census, U.S. Department of Commerce.

²⁷² *Id.*

²⁷³ 47 U.S.C. § 309(j)(3)(B).

²⁷⁴ 47 U.S.C. §§ 309(j)(3)(A), (C).

²⁷⁵ *See* 47 U.S.C. § 337(c)(1).